# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of Implementation of the NET 911 Improvement Act of 2008	)	WC Docket No. 08-171
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# **COMMENTS OF VONAGE HOLDINGS CORPORATION**

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#### **Summary**

Vonage has taken significant steps over the past three years to implement the FCC's VoIP E911 requirements. The company has spent millions of dollars and thousands of manhours to create public safety solutions for its customers, and has achieved remarkable success in this endeavor. However, Vonage and other interconnected VoIP providers ("IVPs") still face significant E911 implementation issues in certain areas. If granted direct access to capabilities necessary to provision E911 services IVPs would have additional flexibility to improve their present E911 systems and would be better situated to support next-generation E911. This direct access is not only in the public interest, it is also required by the New and Emerging Technologies 911 Improvement Act ("Act"). The Act requires the Commission to adopt rules requiring entities that own or control E911 capabilities to make available those inputs to IVPs. Such direct access will enable Vonage and other IVPs to speed E911 deployment; build flexibility, redundancy and diversity into E911 services; take true ownership and control over 911 service to customers; and begin the transition to a next generation IP 911 network.

In order to implement the Act, the Commission must establish a non-exhaustive list of capabilities necessary in the provision of VoIP E911 service, including, but not limited to: ESQKs or p-ANIs, real-time ALI database access, Emergency Service Numbers, Master Street Address Guides, Shell Records, and Selective Router interconnection. The Commission also must establish a mechanism to update that list as technology advances and designate the 911 Selective Router as the demarcation point for allocating E911 implementation costs between IVPs and Public Safety Answering Points (PSAPs), which is necessary to put IVPs at parity with Commercial Mobile Service ("CMS") providers as required by the Act. Finally, the FCC should include network testing and dispute resolution procedures, E911 agreement filing requirements,

and a national Selective Router registry mechanism in its implementing regulations. Rules that require transparent and publicly accessible information about the network and capabilities that make up the nation's current E911 system are necessary to meet Congress' mandates of non-discriminatory access for IVPs, and to move the country closer to next-generation E911.

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# **COMMENTS OF VONAGE HOLDINGS CORPORATION**

# **Introduction and Background**

Vonage Holdings Corporation ("Vonage"), through its undersigned attorneys, submits its Comments on the Notice of Proposed Rulemaking<sup>1</sup> in the above-referenced docket implementing the New and Emerging Technologies 911 Improvement Act ("Act").<sup>2</sup> The Act imposes E911 obligations on and grants corresponding rights to "IP-enabled voice service providers," which are defined as interconnected VoIP service providers ("IVPs") pursuant to the Commission's rules.<sup>3</sup> The Act requires the Commission to issue regulations that ensure that IVPs have the ability to exercise their rights to access 911 and enhanced 911 ("E911") "capabilities." Specifically,

An IP-enabled voice service provider that seeks capabilities to provide 9-1-1 and enhanced 9-1-1 service from an entity with ownership or control over such capabilities, to comply with its obligations [to provide subscribers 911 and E911 service pursuant to

<sup>&</sup>lt;sup>1</sup> See Implementation of the NET 911 Improvement Act of 2008, WC Docket No. 08-171, Notice of Proposed Rulemaking, FCC 08-195 (rel. Aug. 25, 2008) ("NET 911 Act NPRM").

<sup>&</sup>lt;sup>2</sup> New and Emerging Technologies 911 Improvement Act of 2008, Pub. L. No. 110-283 (amending the Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (Wireless 911 Act)) ("Act" or "NET 911 Act").

<sup>&</sup>lt;sup>3</sup> See NET 911 Act, § 101. See also 47 C.F.R. § 9.3. "IVP" and "IP-enabled voice service provider" are used interchangeably herein.

<sup>&</sup>lt;sup>4</sup> See NET 911 Act, § 101.

Commission rules], *shall*, for the exclusive purpose of complying with such obligations, *have a right of access* to such capabilities, including interconnection, to provide 9-1-1 and enhanced 9-1-1 service on the same rates, terms, and conditions that are provided to a provider of commercial mobile service.<sup>5</sup>

The Act further directs the Commission to "take into account any technical, network security, or information privacy requirements that are *specific to IP-enabled voice services*." Finally, with respect to any capabilities that are *not* required to be made available to a commercial mobile service provider but that the Commission determines are necessary for an IVP to provide 911 and E911 services, such capabilities shall be made available at the same rates, terms, and conditions as would apply if such capabilities were made available to a commercial mobile service provider.<sup>7</sup>

In the *NET 911 Act NPRM*, the Commission seeks comments and information on the specific duties imposed on and rights granted to IVPs. Pursuant to the Act, the Commission must determine what regulations are necessary to provide IVPs parity of access to certain elements and capabilities necessary for enhanced E911 services from entities that own or control an E911 capability ("E911 System Service Providers").

Through its *VoIP E911 Order*,<sup>8</sup> the Commission enhanced public safety by ensuring that E911 is available to users of interconnected VoIP services throughout the country. In response to that order, Vonage has engaged numerous Public Safety Answering Points ("PSAPs"), government bodies, vendors, competitive carriers, incumbent local exchange carriers ("ILECs"), database operators and members of the public safety community to implement an E911 solution

<sup>&</sup>lt;sup>5</sup> *Id.*(emphasis added).

<sup>&</sup>lt;sup>6</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>7</sup> See id.

<sup>&</sup>lt;sup>8</sup> *IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, FCC 05-116 (rel. June 3, 2005) ("*VoIP E911 Order*").

as rapidly as possible. Vonage has undertaken extraordinary measures to enable VoIP E911, and has done so nationwide. As part of this process, Vonage has collected a considerable volume of information that should be useful to the Commission as it implements the Act. In an effort to provide ongoing transparency and openness, the company has filed numerous *ex parte* letters to update the Commission on the status of its progress.

Vonage's success in this area is simply unmatched by other non-facilities based service providers. As of July 1, 2008, Vonage provides either basic or enhanced 911 service to nearly 99% of its subscriber lines, or more than 2.4 million lines in all. For 98.45% of its customers, Vonage provides the full suite of E911 service pursuant to NENA7s i2 standard, as presently available. This means that all such 911 calls are delivered via the native 911 network to the geographically appropriate PSAP and the PSAP is able to access both call back information and location information for that customer. In addition to providing 911 service to existing customers, Vonage can provide E911 service pursuant to NENA's i2 standard, as presently available, to 2,226 additional PSAPs that do not yet serve Vonage subscribers.

Although these numbers show significant progress in Vonage's rollout of VoIP E911 services, they do not reflect some significant issues that still face the company and industry. Absent

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Further, for 0.48% of its customers, Vonage provides voice-only 911 service because the PSAP that serves these customers' Registered Location is not capable of handling location and/or call back information. For 0.12% of its customers, Vonage has 3rd party direct trunk connectivity to the appropriate Selective Router, and has gathered and processed all the necessary data inputs from the relevant ILECs and/or PSAPs to provide full E911 service, but has not yet completed certain necessary system testing (estimated to be completed within 5 to 45 days). For 0.27% of its customers, Vonage currently has 3rd party direct trunk connectivity to the appropriate Selective Router and has gathered all the necessary data inputs from the relevant ILECs and/or PSAPs to provide full E911 service, but the ILECs and VoIP Positioning Centers have not yet loaded the data into their respective databases. For 0.09% of its customers, Vonage currently has 3rd party trunk connectivity to the appropriate Selective Router but is in the process of gathering the necessary data to provide E911 service from the relevant ILECs and/or PSAPs. For 0.27% of its customers, Vonage lacks direct trunk connectivity to the appropriate Selective Router, and is attempting to gather the necessary information to order trunk connectivity to these Routers or is otherwise awaiting their installation. Finally, for 0.32% of its customers, Vonage has been unable to provide 911 service because the relevant PSAP has refused to accept any VoIP 911 calls.

Commission action to force E911 System Service Providers to make available necessary elements needed to provision E911 services, ensure that there are dispute resolution and other mechanisms in place, and address other technical and operational challenges IVPs face, Vonage will be unable to take true ownership or control over the 911 services it provides to customers.

Limitations on access to E911 elements delays, and in some cases denies, E911 services to VoIP subscribers. Further, as the FCC's regulatory framework now stands, Vonage, and most other IVPs for that matter, are dependant on a small handful of subcontractors to provide E911 services to their customers. Neither wireline nor wireless telecommunications carriers are subject to such restrictions. The Act entitles Vonage to the same direct access to E911 capabilities enjoyed today by CMS providers. Such direct access will put Vonage on equal footing with its voice competitors, allowing Vonage the flexibility to fully implement its own E911 systems, rather than relying on ILECs or third party vendors; permitting Vonage to exercise more control over its E911 service; and enabling Vonage to achieve greater economies of scale and operational efficiencies, to the benefit of its customers. Most importantly, direct access to E911 capabilities will allow Vonage and other IVPs to deploy E911 services to their customers more quickly, and enable more diverse, robust and flexible emergency service systems to the benefit of all VoIP subscribers and public safety generally. Absent a Commission mandate to allow IVPs direct access to 911 elements, and a dedication to update and revise the list of "capabilities" as technology advances, Vonage will be unable to rollout next generation 911 services as contemplated by Congress in the Act. 10

<sup>&</sup>lt;sup>10</sup> See NET 911 Act, § 102.

# I. The FCC Should Specify and Define the Capabilities Necessary for the Provision of VoIP E911 Services

The first issue presented by the NET 911 Act NPRM is whether the Commission should define "capabilities" in this rulemaking, or determine what constitutes "capabilities" on a caseby-case basis. 11 Congress intended for the FCC to articulate the specific capabilities IVPs have rights to access in order for those service providers to comply with the Commission's VoIP E911 rules. Nowhere does Congress imply that these determinations should be made on a case-bycase basis, and doing so would needlessly delay implementation and violate Congress' mandate that within 90 days after the enactment of the Act, the Commission shall issue regulations implementing such Act, including regulations that "ensure that IP-enabled voice service providers have the ability to exercise their rights under subsection (b)."12 Determining the capabilities on a case-by-case basis, after the 90-day regulatory implementation period, would ignore Congress' mandate that the FCC's regulations ensure that IVPs have the ability to exercise their rights "to access to such capabilities, including interconnection, to provide 9-1-1 and enhanced 9-1-1 service on the same rates, terms, and conditions that are provided to a provider of commercial mobile service." The plain terms of the Act, therefore, require that the FCC determine in this rulemaking a list of capabilities IVPs require to provide E911 services so that IVPs may access those capabilities by day 91.14

Although the Commission must establish a clear, non-exhaustive, and prospective definition of "capabilities" in order to allow IVPs the ability to exercise their rights under the

<sup>&</sup>lt;sup>11</sup> See NET 911 Act NPRM, ¶ 6.

<sup>&</sup>lt;sup>12</sup> NET 911 Act, § 101 (emphasis supplied).

<sup>&</sup>lt;sup>13</sup> NET 911 Act, § 101.

<sup>&</sup>lt;sup>14</sup> The FCC could establish, in addition to this list, a standard for case-by-case determination of whether additional capabilities meet the requirements of the Act.

legislation, it must also establish a method for updating that definition as E911 and VoIP technology and network architecture advances. The Act states that the Commission may "modify such regulations from time to time, as necessitated by changes in the market or technology, to ensure the ability of an IP-enabled voice service provider to comply with its [E911 obligations] and to exercise its rights [to access 911 and E911 capabilities necessary to provide E911 services]."

To meet this mandate, FCC regulations should provide that IVPs may petition the FCC to include additional capabilities, criteria, or elements, not already enumerated in the initial definition of "capabilities." In order to ensure that the country is afforded the most robust, redundant, and diverse 911 network possible, the regulations should ensure that all such petitions are decided on a timely basis (e.g., within 90 days, with one 30-day extension at the FCC's option) and that the implementation timeframes are clearly laid out in the decision. Public safety demands that such requests be addressed as promptly as possible.

# II. "Capabilities" Necessary For the Provision of VoIP E911

The next appropriate question for Commission consideration is: What should the list of "capabilities" include and exclude?<sup>16</sup> The Congressional Report accompanying the Act ("Report") emphasizes the type of capabilities the Commission must consider.<sup>17</sup> The Report states that "capabilities" shall be construed to include both those components that wireless carriers use to provide 911 and E911 service that VoIP providers also need to provide 911 and E911 service, as well as those components that VoIP providers need that wireless carriers do not.<sup>18</sup> The Report requires that the Commission "consider equipment; interfaces, such as PSAP interface and

<sup>&</sup>lt;sup>15</sup> NET 911 Act, § 101.

<sup>&</sup>lt;sup>16</sup> See NET 911 Act NPRM,  $\P$  6 ("To the extent a prospective determination is appropriate, we seek comment on the definition of 'capabilities.'").

<sup>&</sup>lt;sup>17</sup> H.R. Rep. No. 110-442 (2007) ("Report") (attached hereto as "Attachment A").

<sup>&</sup>lt;sup>18</sup> See Report, at 14.

integration capabilities; networks, such as Emergency Service Numbers, Emergency Service Query Keys, and Emergency Service Routing Numbers; Selective Routers; trunklines; nondialable pseudo automatic number identification numbers (p-ANIs); facilities, including access to voice and data communication ports; databases; and other components" to the extent that any of these are needed to support the seamless transmission, delivery, and completion of VoIP E911 services. This reinforces the plain text of the statute that the Commission must adopt a list of capabilities as part of this rulemaking so that IVPs may exercise their rights on day 91.

In addition to adopting a list of capabilities that include specific 911 and E911 elements, the Commission should define "capabilities" broadly to include interconnection, elements, services, testing, agreements, and any features necessary in an IVP's provision of E911 service. This definition will then become the basis against which petitions to expand the list of capabilities will be judged.

# A. Elements Necessary for Successful E911 Deployment

Pursuant to the Act, the following (non-exhaustive) elements should be enumerated as "capabilities" by the Commission. Each capability is necessary in the provision of E911 service by IVPs:

#### ESQKs/p-ANIs

Selective Routers are the "gateway" to the E911 network. However, they cannot accept non-native or non-geographic telephone numbers such as those provided to commercial mobile service ("CMS") or VoIP customers. To "fix" this technological limitation, wireless carriers use, on a real-time basis, an Emergency Services Query Key ("ESQK," also called Pseudo Automatic

<sup>&</sup>lt;sup>19</sup> *Id.* Vonage provided the Commission a non-exhaustive list of necessary capabilities in a July 10, 2008 *ex parte* presentation. *See* Letter from Ronald W. Del Sesto, Jr., counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (filed July 11, 2008) ("*Vonage Capabilities Ex Parte*") (attached hereto as "Attachment B").

Number Identification ("p-ANI")). The p-ANI "unlocks" the Selective Router, which would otherwise block non-native CMS (and VoIP) numbers. p-ANI is therefore a necessary element for delivering interconnected VoIP 911 calls to the native 911 network.

p-ANI availability is an essential element for VoIP E911 deployment, and the NENA i2 Standard requires the use of p-ANIs.<sup>20</sup> Today, IVPs cannot obtain p-ANI resources directly. Where p-ANI inputs are unavailable, IVPs cannot "unlock" the Selective Router to deliver nomadic VoIP E911 calls to the appropriate PSAP. In contrast, CMS providers have direct access to p-ANI.<sup>21</sup> Because p-ANI is necessary to provide VoIP E911 services, and it is a capability CMS providers have direct access to, IVPs must be entitled to the same direct access under the Act. Furthermore, the Report requires that when developing its regulations, "the Commission should ... reexamine its existing regulations and make any necessary changes to comply with H.R. 3403, which include, but are not limited to, ensuring that VoIP providers that have a duty to provide 911 and E-911 services but are not competitive LECs have direct access to p-ANIs." <sup>22</sup>

p-ANI is a digit string that uniquely identifies an ongoing emergency services call and is used to correlate the emergency services call with the associated data messages. It may also identify an emergency services zone and may be used to route the call through the network.

<sup>&</sup>lt;sup>20</sup> See generally NENA, Interim VoIP Architecture for Enhanced 9-1-1 Services (i2), Dec. 6, 2005 ("NENA i2 Standard"), available at: <a href="http://www.nena.org/media/File/08-001\_20051205.pdf">http://www.nena.org/media/File/08-001\_20051205.pdf</a>.

The ATIS p-ANI guidelines make clear that "Eligible Users" may obtain p-ANI resources. An "Eligible User" is an entity: "1) That demonstrates that it is permitted under applicable law to access p-ANI resources in the area for which the p-ANI resources are sought; 2) Has been assigned a valid Operating Company Number (OCN) by the National Exchange Carrier Association, Inc. (NECA); 3) Has been assigned a valid company identification number by NENA; and 4) Self-certifies that it will provide the technical and functional capability to route traffic or provide routing instructions to enable emergency call delivery to a PSAP." Alliance for Telecommunication Industry Solutions (ATIS), ATIS- 0300089, p-ANI Administration Guidelines, at 30 (Mar. 30, 2007) ("ATIS p-ANI Guidelines"). Under these guidelines CMS providers have access to p-ANIs.

Report, at 14.

IVPs require access to the appropriate system or systems used to provision the ESQK or p-ANI pool for the Selective Router and the ALI database that serves a particular Public Safety Answering Point's ("PSAP's") operations. As discussed below, IVPs also need the cooperation of the various PSAPs and other appropriate entities for the creation of records in the Master Street Address Guide ("MSAG," see discussion below) in order to provision the p-ANI pool. IVPs, therefore, require a standardized system to obtain p-ANI resources from ILECs or directly from a numbering administrator. The quantity of p-ANI numbers required should be determined by projected IVP call volumes for each PSAP.

The Alliance for Telecommunications Industry Solutions ("ATIS") and the North American Numbering Council ("NANC") adopted p-ANI guidelines for the administration and assignment of non-dialable p-ANI numbers to eligible users. Interim guidelines (and an interim administrator, Neustar) were adopted and instituted in 2006. The ATIS and NANC permanent guidelines were provided to the FCC in April 2007 for final approval.<sup>23</sup> However, they will not go into effect until the FCC provides direction on the technical requirements document, selects a permanent numbering administrator, and issues an order implementing them. Under the present p-ANI guidelines, IVPs are not granted ESQKs, a vital resource to the interconnection of IVPs to the native 911 network. CMS providers have been granted access to this E911 capability, and as such, IVPs should be given direct access to p-ANI resources.<sup>24</sup>

#### **Real-Time ALI Database Access**

The adopted guidelines are available at: <a href="http://www.fcc.gov/wcb/cpd/Nanc/nanccorr.html">http://www.fcc.gov/wcb/cpd/Nanc/nanccorr.html</a>.

<sup>&</sup>lt;sup>24</sup> See Report at 14 ("The Commission should also reexamine its existing regulations and make any necessary changes to comply with H.R. 3403, which include, but are not limited to, ensuring that VoIP providers that have a duty to provide 911 and E–911 services but are not competitive LECs have direct access to p-ANIs.").

Real-time access to automatic location information ("ALI") databases is an essential component for VoIP E911 deployment, and their use is required under the NENA i2 Standard. Currently, IVPs cannot obtain direct access to ALI databases. In contrast, the Commission's rules specify that "[a]n incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to signaling, call-related databases." Call-related databases "include, but are not limited to, the calling name database, 911 database, E911 database...." As such, CMS providers have access to 911 and E911 databases. CMS providers have access to these databases through interconnection agreements with ILECs. Because ALI database access is necessary to provide VoIP E911 services, and it is a capability CMS providers have direct access to, IVPs must be entitled to the same direct access under the Act.

An ALI database relates a specific telephone number to an address. This database accepts a PSAP query with a telephone number and responds with a corresponding address. In the case of an ESQK/p-ANI, the ALI database "steers" the query to an appropriate IVP database and then steers the response back to the PSAP. ALI databases are typically owned by ILECs or PSAPs. Because IVPs must be able to process both "native" and "non-native" telephone numbers in any given geographic area, they require real-time access to the ALI database system to provide time-of-call updates. Database owners will need to provide requirements for the ALI update interface or ALI steering protocols in use by the ALI system.

<sup>&</sup>lt;sup>25</sup> See generally NENA i2 Standard.

<sup>&</sup>lt;sup>26</sup> 47 C.F.R. § 51.319(d)(4)(i).

<sup>&</sup>lt;sup>27</sup> 47 C.F.R. § 51.319(d)(4)(i)(B).

<sup>&</sup>lt;sup>28</sup> See, e.g., Amendment No. 1 to the Interconnection Agreement Between Verizon Northwest Inc. and Cellco Partnership (Verizon Wireless) et al., Art. VII 911/E911 Arrangements, § 2.8.3.2, Id. Pub. Util. Comm'n Case No. GTE-T-97-13 (Dec. 11, 2003) ("Verizon-Verizon Wireless ICA") available at: <a href="http://www.puc.idaho.gov/internet/cases/tele/GTE/GTET9713/20031211AMENDMENT%201.PDF">http://www.puc.idaho.gov/internet/cases/tele/GTE/GTET9713/20031211AMENDMENT%201.PDF</a> (granting Verizon Wireless direct connectivity to the Verizon ALI database).

# **Emergency Service Numbers**

Access to Emergency Service Numbers ("ESNs") is an essential component for VoIP E911 deployment, and their use is necessary under the NENA i2 Standard.<sup>29</sup> Although multiple ESNs are not typically used for CMS E911, in Vonage's experience, PSAPs require IVPs to use ESNs just as wireline carriers do.<sup>30</sup> ESNs are usually three to five digit numbers representing a unique combination of emergency service agencies (Law Enforcement, Fire, and Emergency Medical Service) designated to serve a specific range of addresses within a particular geographical area, or Emergency Service Zone ("ESZ"). ESNs facilitate selective routing and selective transfer, if required, to the appropriate PSAP and dispatching of the proper service agencies. In areas where they are used, IVPs require ESNs in order to route E911 calls to the specification of PSAP. IVPs need this E911 element to be created in ILEC systems on a PSAP-by-PSAP basis. The Commission should direct any PSAP that wishes to utilize multiple landline based ESNs to provide corresponding geographic boundaries to IVPs.

Depending on the jurisdiction, landline ESNs can expand either into the 100s or 1000s. Although PSAPs require IVPs to use ESNs, IVPs do not have access to potential ILEC and PSAP ESN changes. The Commission should ensure that IVPs and their agents have access to (1) the number of ESNs per PSAP; (2) the geographic boundaries of an ESN; and (3) notification when ESNs are modified. Gaps in such information affect the ability of IVPs to provide E911 services to their customers. The Commission should also recognize, as is in-place for the vast majority of CMS implementations, the simplicity of a single ESN and encourage it where at all possible.

<sup>&</sup>lt;sup>29</sup> See generally NENA i2 Standard.

<sup>&</sup>lt;sup>30</sup> The Act states that IVPs must be afforded those capabilities necessary for the provision of E911 service, even if such capabilities are not typically provided to or used by CMS providers. *See* NET 911 Act, § 101.

#### **Master Street Address Guides**

Access to the Master Street Address Guides ("MSAGs") used throughout the country is a necessary component for VoIP E911 deployment, and their use is required under the NENA i2 Standard.<sup>31</sup> Currently, IVPs cannot obtain direct access to MSAG databases. CMS providers do not require the use of MSAGs because they provide other types of location information, not street addresses to PSAPs, as discussed below.<sup>32</sup>

MSAGs are generally controlled by PSAPs or other local government entities (but may be controlled by ILECs), and access to them is typically restricted to telecommunications service providers. MSAGs are used by municipalities or other entities to assign a particular police, fire, or rescue agency to a given street and number range. MSAG entries match the IVP customer's Registered Location to the assigned ESN for that location. IVPs need this E911 element to be created in ILEC systems on a PSAP-by-PSAP basis. The MSAG can be controlled by a variety of entities throughout the country. The Commission should make clear that IVPs should have access to MSAGs on the same terms and conditions as wireline and wireless carriers.

#### **Shell Records**

Shell records (also called MSAG ledgers) are a necessary component for the provision of VoIP E911 service, and the NENA i2 Standard requires their use.<sup>33</sup> Currently, IVPs cannot directly manage, develop or utilize shell records because they are maintained in ILEC databases. CMS providers do not typically utilize shell records because they do not utilize MSAG databases

<sup>&</sup>lt;sup>31</sup> See generally NENA i2 Standard.

The Act states that IVPs must be afforded those capabilities necessary for the provision of E911 service, even if such capabilities are not typically provided to or used by CMS providers. *See* NET 911 Act, § 101.

<sup>&</sup>lt;sup>33</sup> See generally NENA i2 Standard.

similar to landline carriers.<sup>34</sup> However, IVPs must use them to route E911 calls, and therefore, (as a listed "capability") the Commission must require ILECs and other entities to provision IVP shell records in the appropriate E911 databases so IVPs can route E911 calls.

In order to present an appropriate call back number, class of service, NENA ID, and other information required by public safety, IVPs require the established ALI database provider in each geographic area to construct and provide shell records for the PSAPs. Shell records contain the customer's true telephone number and location information and must be transmitted to the PSAPs for the provision of effective E911 service. Shell records are the vehicle that permits PSAPs to receive ANI and the Registered Location of the E911 caller. Shell records are used to associate the p-ANI with the IVP and the proper ESN, if required, for each E911 call. This E911 element must be created in the ILEC systems on a PSAP-by-PSAP basis. ILECs alone, as the 911 System Service Provider, have access to the information (ESNs and/or MSAG) within their databases. Without access to that information, IVPs cannot create functional E911 databases. IVPs must submit the p-ANI and MSAG information to the ILEC for association to the corresponding shell records in the ILEC's own E911 database (which are maintained by its automatic location identification ("ALI") provider), thereby allowing ALI "steering" to be enabled. Only after that ILEC processing is completed will IVP E911 calls be "selectively routed" and inquiries from the PSAPs seeking Registered Location information for IVP customers be "steered" to the correct IVP database. In order for the E911 system to function, the information in the ILEC database must match exactly the information in the IVP database. If the information does not match, a "failure to provision" error will occur and the E911 system will not operate properly.

<sup>&</sup>lt;sup>34</sup> The Act states that IVPs must be afforded those capabilities necessary for the provision of E911 service, even if such capabilities are not typically provided to or used by CMS providers. *See* NET 911 Act, § 101.

Shell records are therefore necessary to the provision of VoIP E911 and should be included in the FCC's list of capabilities.

#### **Selective Router Interconnection**

Access to Selective Routers is a necessary component of VoIP E911 service, and their use is required under the NENA i2 Standard.<sup>35</sup> Currently, IVPs do not have direct access to Selective Routers. CMS providers, on the other hand, have access to Selective Routers through interconnection agreements with ILECs.<sup>36</sup> Because interconnection to Selective Routers is necessary to provide VoIP E911 services, and it is a capability CMS providers have direct access to, IVPs must be entitled to the same direct access under the Act.

Selective Routers are used to route 911 emergency calls to the proper PSAP based on the ESN code that has been assigned to the caller's location. There is no clear count or list of Selective Routers that are used across the country to enable E911. In fact, there has been a recent trend of PSAPs and 911 authorities operating their own Selective Routers. In order to process a 9-1-1 call, an interconnected VoIP provider needs dedicated access to the Selective Router.

In some regions, the ILEC has created a closed facility with a limited number of ports for "new" connections to the native 9-1-1 network. Instead of updating the facility, the ILEC serves as a gatekeeper for PSAP traffic, limiting the number of competitors. In order to grant IVPs the rights mandated by Congress, the FCC must make clear that Selective Router owners may not limit the number of ports into the native 911 network or deny IVPs direct access.

IVPs require access to voice trunks in order to provide E911 service. This can be done through an arrangement for a trunk to an emergency services gateway (ESGW) that serves all of

<sup>&</sup>lt;sup>35</sup> See generally NENA i2 Standard.

<sup>&</sup>lt;sup>36</sup> See, e.g., Verizon-Verizon Wireless ICA, § 2.2, (granting Verizon Wireless access to Selective Routers, Verizon CLLI codes, and specifications on the Selective Router's service area).

the selective routers or 911 tandems in a particular region. Alternatively, IVPs need access to ordering information, locations and specifications for trunk types for each Selective Router in a particular geographic service area. SS7 trunk types are typically preferred, but IVPs should be given flexibility on the type of trunking arrangement they prefer. Some IVPs may want to order more than one trunk for each Selective Router in order to provide redundancy and diversity. IVPs may also want to obtain Internet access and a SIP gateway co-located with the Selective Router or 911 tandem.

IVPs also require access to data trunks in order to provide E911 service. For each ALI system in use in a service area, IVPs require ordering information, locations and specifications for data transport trunk types for each server, including any servers maintained at or by the PSAPs. Again, some IVPs may want to order two trunks to each of the ALI server locations, one each from two location diverse origination points.

Likewise IVPs require access to a comprehensive list of all of the Selective Routers in the United States and a corresponding list of which PSAPs are connected to which Selective Routers. For example, in many instances, PSAPs and ILECs are unable to provide Selective Router coverage mapping information in a usable format, which is critical to designing the network and placing orders to the appropriate Selective Routers. The Commission should utilize that authority provided by Congress in the Act to: a) require PSAPs, on a regular basis, to provide the Commission with contact information, and require PSAPs to update that information as it may change from time-to-time;<sup>37</sup> and b) require ILECs, PSAPs, and other owners of Selective Routers (E911 System Service Providers) to provide contact information for those providers of Selective

<sup>&</sup>lt;sup>37</sup> The FCC already has a PSAP registry, available at <a href="http://www.fcc.gov/pshs/services/911-services/enhanced911/psapregistry.html">http://www.fcc.gov/pshs/services/911-services/enhanced911/psapregistry.html</a>. But, it apparently is only updated as PSAPs provide new information to the Commission. The Commission should *require* PSAPs to update their contact information with the Commission within a particular time frame when any changes are made.

Routers including testing procedures, classes and types of services supported by the PSAPs, and other information concerning 911 and E911 elements.<sup>38</sup> The FCC should publish this collected information and make it available to telecommunications carriers, wireless carriers, IVPs, other emergency service providers, and vendors (or their agents).

## B. Network Services, Testing and Agreements

The critical importance of providing E911 services and functionalities to the public should lead the Commission to conclude that "network services, testing and other agreements"<sup>39</sup> are also necessary capabilities under the Act. As detailed in *Vonage Capabilities Ex Parte*, successful IVP E911 deployment requires more than just the technical elements and inputs needed to provision 911 and E911 services. For example, all parties in the E911 deployment chain must cooperate in testing to ensure that the systems and inputs are working correctly. The Commission should require parties that provide "capabilities" to undertake testing with IVPs as needed to ensure that those "capabilities" are functioning properly.

# C. Other Necessary "Capabilities"

As part of the Act, Congress encouraged the transition to a national IP-enabled emergency network system. <sup>40</sup> To support the present 911 system (as well as anticipated future needs), the Commission should ensure that IVPs are granted the right and ability to obtain voice and data transport services (and other elements as set forth herein) used for E911 routing from ILECs and other capability "owners and operators" in a manner and quantity that allows IVPs to build flexibility and redundancy into their E911 system design. IVPs need more than just the bare

<sup>&</sup>lt;sup>38</sup> The FCC should similarly require PSAPs, ILECs, and other service providers to regularly update the Commission with any new or changed information.

<sup>&</sup>lt;sup>39</sup> See NET 911 Act NPRM,  $\P$  6 ("Do 'capabilities' include network services, testing, and agreements?").

<sup>&</sup>lt;sup>40</sup> See NET 911 Act, § 102.

minimum when it comes to the provision of E911 services. Public safety dictates that E911 services be flexible, diverse, and redundant.

# D. IVP "Capabilities" That Are Not Necessary For Commercial Mobile Service Providers But Are Necessary for IVPs

As a general rule, Vonage has found that the PSAP community is more comfortable with the landline environment than the wireless environment. In the vast majority of E-911 implementations, local emergency responders have required IVPs to mimic the landline system as much as possible. However, VoIP E911 systems are best described as a hybrid of wireline and wireless 911 networks. As such, there are some elements and capabilities that are required by IVPs to provision E911 services that are not required by CMS providers. These demands by public safety agencies that IVPs incorporate certain aspects of landline E911 features require that the FCC make available to IVPs traditional landline capabilities.

First, Vonage has found that access to the MSAG is not required by most wireless providers. Instead, CMS providers feed "x, y" coordinates to PSAPs instead of specific address information obtained via the applicable MSAG. Using a street address is a wireline capability, which as detailed above, circles back to the reason why IVPs require direct access to p-ANI resources. Without p-ANI, use of the MSAG in many regions becomes impossible. The use of ESNs is also a wireline-specific 911 solution that is not used by most wireless service providers. The Act states that even for those capabilities not required to be made available to CMS providers, but that are necessary for IVPs to comply with their FCC obligations to provide E911 services, the Commission shall provide "that such capabilities shall be available at the same rates, terms, and conditions as would apply if such capabilities were made available to a commercial mobile service provider."

<sup>&</sup>lt;sup>41</sup> NET 911 Act, § 101.

# III. Ownership, Control, Availability, and Right of Access

#### A. Ownership or Control

The Commission requests comment on who owns and controls the above-identified "capabilities," and how the Commission should fulfill its statutory mandate to ensure that IVPs have the ability to exercise their rights to access those capabilities pursuant to the Act.<sup>42</sup> As noted above, the "capabilities" required by IVPs are held by numerous types of entities including ILECs, state and local governments or their agencies (i.e., PSAPs), and third party entities such as numbering resource administrators.<sup>43</sup> Certain elements, such as the ALI databases, are held by different types of entities in different geographic locations (in some places they are controlled by ILECs, in others they may be controlled by a PSAP or other entity). Thus, the Commission's regulations must make clear that regardless of the type of entity that owns, controls, or operates the element in any given location, the entity must grant IVPs direct access to those "capabilities" identified above.

As stated in the *Vonage Capabilities Ex Parte*, the FCC should define "an entity with ownership or control over an E911 element" to include carriers and non-carriers, including but not limited to state and local authorities (*i.e.*, E911 System Service Providers). At the outset, the FCC should make clear that it has jurisdiction to enforce IVP access to E911 capabilities through its Title I authority. In order to ensure IVP access, the Commission should state that all E911 capabilities required for the provision of VoIP E911 service fall under the Commission's Title I authority under the Communications Act of 1934, as amended, regardless of whether they are controlled or owned by telecommunications carriers or not, as they concern the promotion of

<sup>&</sup>lt;sup>42</sup> See NET 911 Act NPRM, ¶ 8.

The Commission holds exclusive, plenary authority over numbering resources pursuant to Section 251(e) of the Communications Act of 1934, as amended. 47 U.S.C. § 251(e).

"safety of life and property through the use of wire and radio communication" under Section 1 of the Act, 47 U.S.C. § 151.

Further, as noted in the *Vonage Jurisdiction Ex Parte*, <sup>44</sup> in order to fulfill Congress' directive that VoIP providers be given access to capabilities, elements, and components necessary for the provision of E911 services, the Commission must direct PSAPs and related state and local government agencies to provide IVPs such access. The Act states that for the purpose of providing 911 and E911 services, VoIP providers have the right to access elements and capabilities "from an *entity with ownership or control over such capabilities*," not just telecommunications service providers. The Act directs the Commission to issue regulations that "ensure that IP-enabled voice service providers have the ability to exercise their rights [to obtain such access]." Congress did not state or imply that "entity" should be limited to private parties, telecommunications service providers, or any other small and distinct group. To the contrary, the legislation obligates the FCC to ensure that a VoIP provider may obtain access from any "entity" that owns or controls those required elements and components, including state or local government entities.

The Report accompanying the Act supports this conclusion. It states that "[t]he term 'any entity' should be broadly construed because critical components of the 911 infrastructure may reside with an incumbent carrier, a PSAP, or some *other* entity." Congress, therefore, intended that the FCC require PSAPs, ILECs, and other entities that own or control E911 elements or components to provide access to VoIP providers.

<sup>44</sup> See Letter from Tamar E. Finn, Counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (filed July 23, 2008) ("Vonage Jurisdiction Ex Parte") (attached hereto as "Attachment C").

NET 911 Act, §101(emphasis supplied).

Report, at 14 (emphasis supplied). The Report also notes that, among other things, E911 elements that should be afforded to VoIP providers should include "interfaces, such as PSAP interface and integration capabilities...."

Although it has previously traversed 911 and E911 regulation without excessive disruption to states' authority over their 911 systems,<sup>47</sup> the Commission has exercised authority over PSAPs at the direction of Congress in the past. For example, the 1999 "911 Act" required the FCC to establish a uniform emergency telephone number to be used by all PSAPs: 9-1-1. That legislation established a nationwide uniform standard applicable to all PSAPs that Congress determined to be in the public interest. That implementation of Congress' directive required tangible action by some PSAPs to transition to "9-1-1," but did not divest states and local governments of their general jurisdiction over PSAPs.

Analogously, Congress has now determined that IVP access to E911 capabilities, including those owned or controlled by PSAPs and other state and local government agencies, is in the public interest, and has obliged the FCC to ensure that IVPs are able to obtain access to those elements necessary for the provision of 911 services. Similarly, this will require some action by PSAPs and other bodies, but it will not strip state and local government control over PSAPs, nor will it disrupt their operations.

The Act provides that IVPs that seek capabilities to provide 911 and E911 services "from an entity with ownership *or control* over such capabilities" must be afforded the right to do so.<sup>49</sup> Although PSAPs may have paid for 911 and E911 systems and associated "capabilities," the

<sup>&</sup>lt;sup>47</sup> See, e.g., Cal. Govt. Code 53100; 50 ILCS 750; Tex. Health & Safety Code 772 (demonstrating state control over PSAPs).

<sup>&</sup>lt;sup>48</sup> See Pub. L. No. 106-81 (1999), 47 U.S.C. § 251(e). In implementing the E911 Act, the Commission noted that "[m]andating 911 as the uniform emergency assistance number would appear to ensure greater access to emergency services by mobile telephone customers." "Specifically, Section 251(e) of the Communications Act of 1934 is amended by adding a provision that the Commission designate 911 as the universal emergency telephone number for emergency assistance for both wireline and wireless telephone service. Appropriate transition periods are to be provided for areas in which 911 is not currently in use as an emergency number." See Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Second Memorandum Opinion and Order, CC Docket No. 94-102, ¶¶ 110-111 (rel. Dec. 8, 1999).

<sup>&</sup>lt;sup>49</sup> NET 911 Act, § 101 (emphasis supplied).

entity that controls these "capabilities" is often an ILEC. As such, the Commission must ensure that ILECs and other entities that "control" 911 or E911 capabilities are directed to provide IVPs access to the capabilities, even if they are not the "owners" of the systems.

The Act, the Commission's plenary authority over numbering resources pursuant to Section 251(e) of the Act, and Titles I and II of the Communications Act, all provide the Commission the authority necessary to instruct ILECs, PSAPs (and local or state-administered bodies), numbering administrators, and other entities to offer IVPs access to E911 components.

# B. Demarcation Between IVP and PSAP Responsibility

The Commission should affirm the demarcation points established in the *King County* order. In *King County*, the FCC upheld a Wireless Telecommunications Bureau determination that identified the 911 Selective Router as the demarcation point for allocating E911 implementation costs between wireless carriers and Public Safety Answering Points (PSAPs). A similar determination should be made for IVPs because the demarcation point is required under the Act's CMS parity standard. It is also required for the same policy reasons the Commission cited in *King County*: "clarifying the demarcation point for E911 cost allocations will expedite the roll-out of ... E911 services by helping to eliminate a major source of disagreement between the parties so as to facilitate the negotiation process." The FCC should affirm this determination for purposes of VoIP interconnection and access to those capabilities owned or operated by PSAPs (or other related entities). Such a determination meets the Act's requirement of CMS parity and could significantly alleviate future disputes between parties. Clear demarcation will speed deployment of VoIP E911 and upgrading of the E911 network to next generation technol-

<sup>&</sup>lt;sup>50</sup> See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request of King County, CC Docket 94-102, Order on Reconsideration, FCC 02-146 (rel. July 24, 2002) ("King County").

<sup>&</sup>lt;sup>51</sup> See id., ¶ 1.

ogy as well as preserve FCC and industry resources that would otherwise be wasted in unnecessary dispute resolution.

# IV. Rates, Terms and Conditions

The Commission requests comment on the rates, terms and conditions that should apply to certain capabilities. <sup>52</sup> As an initial matter, the Act requires that IVPs receive a right to access the above-identified capabilities on the "same rates, terms, and conditions" as provided to CMS providers. However, in many cases, the rates, terms and conditions are not publicly available. Many of the contracts that govern such access are not available to the public. As such, the FCC should establish pricing standards applicable to the E911 elements and services required for the provision of VoIP E911 services. Such pricing should be cost-based due to the public safety nature of the elements and services being provided. <sup>53</sup> The FCC should consider whether service agreements made between IVPs and E911 System Service Providers should be filed with the Commission. If the Commission determines that the public filling of such agreements is appropriate, Vonage respectfully requests that the Commission itself maintain that repository, as many agreements concerning E911 elements may cross multiple state borders, and as such, filing them with states or local governments could lead to confusion and unnecessary complexity and expense.

# V. VoIP Technical, Network Security and Information Privacy Requirements

The *NET 911 Act NPRM* requests comment on whether there are any concerns that certain 911 systems may not offer the capabilities necessary, particularly to meet the technical

<sup>&</sup>lt;sup>52</sup> See NET 911 Act NPRM, ¶¶ 9-10.

<sup>&</sup>lt;sup>53</sup> If an ILEC provides the capability, cost-based pricing is required because CMS providers are entitled to cost-based pricing under Sections 251 and 252 of the Communications Act of 1934, as amended. See 47 U.S.C. §§ 251 and 252.

requirements of IP-enabled voice services.<sup>54</sup> Unfortunately the nation's 911 system service providers' technical capabilities vary greatly between ILECs, local authorities and states. Ensuring that entities have a clear process for dispute resolution and escalation should be a key component to alleviate these issues. IVPs cannot transmit calls to a non-Capable PSAP or deploy a complete E911 solution where they have not been given access to critical elements from third party suppliers, some of whom are IVP direct competitors. The Commission should establish a quick, efficient means to resolve disputes concerning the respective roles and responsibilities of the parties that must cooperate with IVPs so that the IVPs can comply with the FCC's rules. The Commission should also make clear that pending the resolution of any dispute between an IVP and an E911 System Service Provider, the E911 System Service Provider must provide such capabilities to IVPs that make a bona fide request. For example, if an IVP requests a "capability" that is not included in the Commission's list and makes a prima facie showing that such capability will be used or useful in its provision of E911 service, the E911 System Service Provider should be required to provide access to such capability pending dispute resolution (see the discussion above concerning case-by-case determinations on additional elements to be included in the definition of "capabilities"). E911 System Service Providers should similarly be prohibited from interrupting service provided to an IVP pending the resolution of any such dispute.

# VI. <u>Delegation of Authority</u>

The *NET 911 Act NPRM* requests comment on whether there any other considerations that should be taken into account by the Commission, including whether it is appropriate to delegate authority for enforcement of some or all of the rules established by the Commission in

<sup>&</sup>lt;sup>54</sup> See NET 911 Act NPRM, ¶ 11.

this proceeding.<sup>55</sup> Generally speaking, it has been Vonage's experience that when the subject matter expertise is available, states have provided more responsive leadership in resolving E911 concerns and issues than their counterparts in local government. That being said, dispute resolution is best kept under FCC oversight, given that many operational issues and capabilities extend over local and state borders. The Commission has authority to retain this authority under the *Vonage Order*<sup>56</sup> and Section 251(h) of the Communications Act, as amended. Placing authority in the hands of local and state authorities may result in forum-shopping by disputing parties, and may lead to inconsistent rulings by various authorities over the proper scope of the Commission's regulations. As such, it is important for the Commission to administer its regulations, dispute processes, and other details that result from this rulemaking proceeding.

# VII. Conclusion

The Act requires the Commission to issue regulations that ensure that IP-enabled voice service providers have the ability to exercise their rights to access 911 and E911 capabilities from E911 System Service Providers.<sup>57</sup> In order to meet this requirement, the Commission must list the "capabilities" that are necessary for the provision of VoIP E911 service so IVPs can access those resources. Those "capabilities" must include, at a minimum, ESQKs or p-ANIs, real-time ALI database access, Emergency Service Numbers, Master Street Address Guides, Shell Records, and Selective Router interconnection. The Commission also must establish a mechanism to update that list as technology advances and designate the 911 Selective Router as the demarcation point for allocating E911 implementation costs between IVPs and PSAPs.

<sup>&</sup>lt;sup>55</sup> See NET 911 Act NPRM, ¶ 12.

<sup>&</sup>lt;sup>56</sup> See *Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, Memorandum Opinion and Order, 19 FCC Rcd. 22404 (2004) ("*Vonage Order*").

<sup>&</sup>lt;sup>57</sup> See NET 911 Act, § 101.

Finally, the FCC should include network testing and dispute resolution procedures, E911 agreement filing requirements, and a national Selective Router registry mechanism in its implementing regulations. Rules that require transparent and publicly accessible information about the network and capabilities that make up the nation's current E911 system are necessary to meet Congress' mandates of non-discriminatory access for IVPs, and to move the country closer to next-generation E911.

Respectfully submitted,

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/S/

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# **Attachment A**

H.R. Rep. No. 110-442 (2007) ("Report")

#### 911 MODERNIZATION AND PUBLIC SAFETY ACT OF 2007

NOVEMBER 13, 2007.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. DINGELL, from the Committee on Energy and Commerce, submitted the following

# REPORT

[To accompany H.R. 3403]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 3403) to promote and enhance public safety by facilitating the rapid deployment of IP-enabled 911 and E-911 services, encouraging the nation's transition to a national IP-enabled emergency network and improve 911 and E-911 access to those with disabilities, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

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#### **AMENDMENTS**

The amendments are as follows: Strike all after the enacting clause and insert the following:

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "911 Modernization and Public Safety Act of 2007".

#### TITLE I—911 SERVICES AND IP-ENABLED VOICE SERVICE PROVIDERS

#### SEC. 101. DUTY TO PROVIDE 911 AND E-911 SERVICE.

The Wireless Communications and Public Safety Act of 1999 is amended—

- (1) by redesignating section 6 (47 U.S.C. 615b) as section 7;
- (2) by inserting after section 5 the following new section:

#### "SEC. 6. DUTY TO PROVIDE 911 AND E-911 SERVICE.

"(a) DUTIES.—It shall be the duty of each IP-enabled voice service provider to provide 911 service and E-911 service to its subscribers in accordance with the requirements of the Federal Communications Commission (in this section referred to as the 'Commission'), as in effect on the date of enactment of the 911 Modernization and Public Safety Act of 2007 and as such requirements may be modified by the Commission from time to time.

"(b) Parity for IP-Enabled Voice Service Providers.—An IP-enabled voice service provider that seeks capabilities from an entity with ownership or control over such capabilities to comply with its obligations under subsection (a) shall, for the exclusive purpose of complying with such obligations, have the same rights, including rights of interconnection, and on the same rates, terms, and conditions, as apply to a provider of commercial mobile service (as such term is defined in section 332(d) of the Communications Act of 1934 (47 U.S.C. 332(d))), subject to such regulations as the Commission prescribes under subsection (c). "(c) REGULATIONS.—The Commission—

"(1) within 90 days after the date of enactment of the 911 Modernization and Public Safety Act of 2007, shall issue regulations implementing such Act, including regulations that—

"(A) ensure that IP-enabled voice service providers have the ability to ex-

ercise their rights under subsection (b);
"(B) take into account any technical, network security, or information privacy requirements that are specific to IP-enabled voice services; and "(C) provide with respect to any conshibitor that

C) provide, with respect to any capabilities that are not required to be made available to a commercial mobile service provider but that the Commission determines under subparagraph (B) of this paragraph or paragraph (2) are necessary for an IP-enabled voice service provider to comply with its obligations under subsection (a), that such capabilities shall be available at the same rates, terms, and conditions as would apply if such capabilities were made available to a commercial mobile service provider; and

"(2) may modify these requirements from time to time, as necessitated by changes in the market or technology, to ensure the ability of an IP-enabled voice service provider to comply with its obligations under subsection (a).

"(d) DELEGATION OF ENFORCEMENT TO STATE COMMISSIONS.—The Commission may delegate authority to enforce the regulations issued under subsection (c) to State commissions or other State agencies or programs with jurisdiction over emergency communications. Nothing in this section is intended to alter the authority of State commissions or other State agencies with jurisdiction over emergency communications, provided that the exercise of such authority is not inconsistent with Federal law or Commission requirements.

(e) Implementation.

"(1) LIMITATION.—Nothing in this section shall be construed to permit the Commission to issue regulations that require or impose a specific technology or

technology standard.

-The Commission shall enforce this section as if this sec-(2) Enforcement. tion was a part of the Communications Act of 1934. For purposes of this section, any violations of this section, or any regulations promulgated under this section, shall be considered to be a violation of the Communications Act of 1934 or a regulation promulgated under that Act, respectively.

"(f) STATE AUTHORITY OVER FEES.

"(1) AUTHORITY.—Nothing in this Act, the Communications Act of 1934 (47 U.S.C. 151 et seq.), the 911 Modernization and Public Safety Act of 2007, or any Commission regulation or order shall prevent the imposition and collection of a fee or charge applicable to commercial mobile services or IP-enabled voice services specifically designated by a State, political subdivision thereof, or Indian tribe for the support or implementation of 911 or E-911 services, provided that the fee or charge is obligated or expended only in support of 911 and E-911 services, or enhancements of such services, as specified in the provision of State or local law adopting the fee or charge. For each class of subscribers to IP-enabled voice services, the fee or charge may not exceed the amount of any such fee or charge applicable to the same class of subscribers to telecommunications services.

"(2) FEE ACCOUNTABILITY REPORT.—To ensure efficiency, transparency, and accountability in the collection and expenditure of fees for the support or implementation of 911 or E-911 services, the Commission shall submit a report within 1 year after the date of enactment of the 911 Modernization and Public Safety Act of 2007, and annually thereafter, to the Committee on Commerce, Science and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives detailing the status in each State of the collection and distribution of 911 fees, and including findings on the amount of revenues obligated or expended by each State or political subdivision thereof for any purpose other than the purpose for which any fee or charges are

presented.

(g) AVAILABILITY OF PSAP INFORMATION.—The Commission may compile a list of public safety answering point contact information, contact information for providers of selective routers, testing procedures, classes and types of services supported by public safety answering points, and other information concerning 911 elements, for the purpose of assisting IP-enabled voice service providers in complying with this section, and may make any portion of such information available to telecommunications carriers, wireless carriers, IP-enabled voice service providers, other emergency service providers, or the vendors to or agents of any such carriers or providers, if such availability would improve public safety

"(h) RULE OF CONSTRUCTION.—Nothing in the 911 Modernization and Public Safety Act of 2007 shall be construed as altering, delaying, or otherwise limiting the ability of the Commission to enforce the rules adopted in the Commission's First Report and Order in WC Docket Nos. 04–36 and 05–196, as in effect on the date of enactment of the 911 Modernization and Public Safety Act of 2007, except as such

rules may be modified by the Commission from time to time."; and
(3) in section 7 (as redesignated by paragraph (1) of this section) by adding

at the end the following new paragraph:

"(8) IP-ENABLED VOICE SERVICE.—The term 'IP-enabled voice service' has the meaning given the term 'interconnected VoIP service' by section 9.3 of the Federal Communications Commission's regulations (47 CFR 9.3).".

#### SEC. 102. MIGRATION TO IP-ENABLED EMERGENCY NETWORK.

Section 158 of the National Telecommunications and Information Administration

Organization Act (47 U.S.C. 942) is amended—

(1) in subsection (b)(1), by inserting before the period at the end the following:

"and for migration to an IP-enabled emergency network";

(2) by redesignating subsections (d) and (e) as subsections (e) and (f), respec-

tively; and

(3) by inserting after subsection (c) the following new subsection:

"(d) MIGRATION PLAN REQUIRED.-

"(1) NATIONAL PLAN REQUIRED.—No more than 270 days after the date of the enactment of the 911 Modernization and Public Safety Act of 2007, the Office shall develop and report to Congress on a national plan for migrating to a national IP-enabled emergency network capable of receiving and responding to all citizen-activated emergency communications and improving information sharing among all emergency response entities.

"(2) CONTENTS OF PLAN.—The plan required by paragraph (1) shall—
"(A) outline the potential benefits of such a migration;

"(B) identify barriers that must be overcome and funding mechanisms to address those barriers;

"(C) include a proposed timetable, an outline of costs, and potential sav-

ings; "(D) provide specific legislative language, if necessary, for achieving the

plan;
"(E) provide recommendations on any legislative changes, including updating definitions, to facilitate a national IP-enabled emergency network;

"(F) assess, collect, and analyze the experiences of the public safety answering points and related public safety authorities who are conducting trial deployments of IP-enabled emergency networks as of the date of enact-

ment of the 911 Modernization and Public Safety Act of 2007;
"(G) identify solutions for providing 911 and E-911 access to those with disabilities and needed steps to implement such solutions, including a rec-

ommended timeline: and

ommended timeline; and

"(H) analyze efforts to provide automatic location for E-911 purposes and recommendations on regulatory or legislative changes that are necessary to achieve automatic location for E-911 purposes.

"(3) Consultation.—In developing the plan required by paragraph (1), the Office shall consult with representatives of the public safety community, groups representing those with disabilities, technology and telecommunications providers, IP-enabled voice service providers, Telecommunications Relay Service providers, and other emergency communications providers and others it deems appropriate" appropriate.".

#### SEC. 103. TECHNICAL AMENDMENTS.

Section 3011(b) of the Digital Television Transition and Public Safety Act of 2005 (Public Law 109–171; 47 U.S.C. 309 note), and section 158(b)(4) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 942(b)(4)) are each amended by striking "the 911 Modernization Act" and inserting "the 911 Modernization and Public Safety Act of 2007".

#### TITLE II—PARITY OF PROTECTION

SEC. 201. LIABILITY.

(a) AMENDMENTS.—Section 4 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615a) is amended—

(1) by striking "parity of protection for provision or use of wireless service" in the section heading and inserting "service provider parity of protection";

(2) in subsection (a)-

(A) by striking "wireless carrier," and inserting "wireless carrier, IP-enabled voice service provider, or other emergency communications provider,'

(B) by striking "its officers" the first place it appears and inserting "their

- (C) by striking "emergency calls or emergency services" and inserting "emergency calls, emergency services, or other emergency communications services";
- (3) in subsection (b)-

(A) by striking "using wireless 9–1–1 service shall" and inserting "using wireless 9-1-1 service, or making 9-1-1 communications via IP-enabled voice service or other emergency communications service, shall"; and

(B) by striking "that is not wireless" and inserting "that is not via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications service"; and

(4) in subsection (c)-

e) in subsection (c)—

(A) by striking "wireless 9–1–1 communications, a PSAP" and inserting "9–1–1 communications via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications service, a PSAP"; and

(B) by striking "that are not wireless" and inserting "that are not via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications services".

munications service"

(b) DEFINITION.—Section 7 of the Wireless Communications and Public Safety Act of 1999 (as redesignated by section 101(1) of this Act) is further amended by adding at the end the following new paragraphs:

(9) Other emergency communications service.—The term 'other emergency communications service' means the provision of emergency information to a public safety answering point via wire or radio communications, and may include 911 and enhanced 911 services.

"(10) Other emergency communications service provider.—The term 'other emergency communications service provider' means-

"(A) an entity other than a local exchange carrier, wireless carrier, or an IP-enabled voice service provider that is required by the Federal Communications Commission consistent with the Commission's authority under the Communications Act of 1934 to provide other emergency communications services; or

"(B) in the absence of a Commission requirement as described in subparagraph (A), an entity that voluntarily elects to provide other emergency communications services and is specifically authorized by the appropriate local or State 911 governing authority to provide other emergency communications services

# TITLE III—AUTHORITY TO PROVIDE **CUSTOMER INFORMATION FOR 911 PURPOSES**

#### SEC. 301. AUTHORITY TO PROVIDE CUSTOMER INFORMATION.

Section 222 of the Communications Act of 1934 (47 U.S.C. 222) is amended-

- (1) by inserting "or the user of an IP-enabled voice service (as such term is defined in section 7 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b))" after "section 332(d))" each place it appears in subsections (d)(4) and (f)(1);
  (2) by striking "Wireless" in the heading of subsection (f); and

(3) in subsection (g)-

- (A) by inserting "or a provider of IP-enabled voice service (as such term is defined in section 7 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b))" after "telephone exchange service";

  (B) by striking "Notwithstanding subsections (b)" and inserting the fol-
- lowing: "(1) IN GENERAL.—Notwithstanding subsections (b)"; and

(C) by adding at the end the following new paragraph: "(2) PROHIBITED USE OF LOCATION INFORMATION DATABASES.—No administrator of any database used for the purpose of facilitating the provision of emergency services may use for any competitive purpose data obtained from unaffiliated telecommunications carriers or IP-enabled voice service providers in the course of maintaining and operating that database. Nothing in this section is intended to prohibit government agencies otherwise authorized under law from requesting information contained in any such database.".

#### Amend the title so as to read:

A bill to promote and enhance public safety by facilitating the rapid deployment of IP-enabled 911 and E-911 services, encourage the Nation's transition to a national IP-enabled emergency network, and improve 911 and E-911 access to those

#### PURPOSE AND SUMMARY

The purpose of H.R. 3403, the 911 Modernization and Public Safety Act of 2007, is to ensure that consumers using Voice over Internet Protocol (VoIP) service can access enhanced 911 (E–911) emergency services by giving VoIP providers access to the emergency services infrastructure and by extending existing liability protections to VoIP service. H.R. 3403 also requires the development of a national plan to move to an IP-enabled emergency network and alters an existing grant program to allow funding for IPenabled emergency networks.

#### BACKGROUND AND NEED FOR LEGISLATION

The evolution of communications networks has repeatedly required that the 911 system be adapted to accommodate new technologies. H.R. 3403 provides necessary legislative solutions to ensure that adaptation for VoIP service.

Dialing 911 is widely recognized as the best way to call for emergency services. Calls to 911 are typically routed by local exchange carriers (LECs) to one of more than 6,000 local public safety answering points (PSAPs) staffed by professionals who assist callers and direct calls to police, fire, and health emergency response providers.

During the last decade, many PSAPs and 911 systems have been upgraded to facilitate the automatic transmission of the caller's telephone number and location. This "E-911" data allow PSAPs to identify automatically the geographic location of the caller and reconnect to the caller, if necessary. It reduces errors in reporting the location of the emergency and in forwarding accurate information

to emergency personnel.

In the 1990s, the Federal Communications Commission (Commission) required wireless carriers to provide E-911 data to PSAPs. The mobility of wireless callers required technical adaptations to the wireline E-911 model to successfully transmit E-911 data in a wireless environment. In 1999, Congress passed the Wireless Communications and Public Safety Act, which granted liability protection to wireless carriers and PSAPs receiving wireless 911 calls. Because wireless carriers already had interconnection rights with wireline carriers under a pre-existing statute—including the right to access the wireline infrastructure—the 1999 Act did not specifically address the right of wireless carriers to access the emergency services infrastructure (also referred to herein as the 911 infrastructure) or the rates, terms, and conditions for such access.

The increasing prevalence of VoIP service requires further adaptation of the 911 system. Today, more than 9 million consumers in the United States use VoIP service as a substitute for traditional telephony. Currently, there are two basic types of VoIP service: fixed and nomadic. Fixed VoIP service is tied to a particular location. VoIP service offered by a cable provider to a home or business is an example of fixed VoIP service. Nomadic VoIP service is portable and can be used with a laptop and a broadband connection. In its First Report and Order in WC Docket Nos. 04–36 and 05–

In its First Report and Order in WC Docket Nos. 04–36 and 05–196 in 2005, the Commission adopted rules requiring providers of "interconnected VoIP service" to provide E–911 capabilities to their customers. H.R. 3403 does not reverse the Commission's actions to date. The Commission, however, only imposed E–911 requirements on providers of VoIP services that today serve as a substitute for traditional wireline telephone service. It did not require entities—typically LECs—that control certain key facilities and infrastructure that are needed to complete 911 and E–911 calls to give VoIP providers access to those facilities and that infrastructure. As a result, VoIP providers entered into commercial arrangements with LECs or third parties to gain access to 911 components. The Commission also concluded that it lacked authority to extend the liability protections afforded to wireline and wireless 911 calls to VoIP 911 calls.

H.R. 3403 would resolve these issues by giving VoIP providers, for the exclusive purpose of providing 911 and E-911 service, the same access to the 911 infrastructure on the same rates, terms, and conditions as is provided to wireless carriers. H.R. 3403 also directs the Commission to promulgate rules to give VoIP providers access only to those components of the 911 infrastructure they need to provide 911 and E-911 service. It is not the intent of this legislation to grant providers of VoIP access to any parts of the 911 infrastructure not needed to provide 911 and E-911 service. H.R. 3403 would provide liability protection for VoIP providers, other emergency communications service providers, public safety officials, and end users relating to the provision and use of VoIP 911 and E-911

service and other emergency communications services that is equivalent to the liability protection that wireline and wireless carriers, public safety officials, and end users have with respect to the provision and use of wireline and wireless 911 and E–911 service.

The provision of E-911 service by VoIP providers also implicates section 222 of the Communications Act of 1934, which governs the protection of customer information (known as Customer Proprietary Network Information, or CPNI). Section 222 includes exceptions to its protections to allow wireline and wireless carriers to provide customer information to PSAPs in emergency situations. There is no similar provision governing or granting exceptions for VoIP service. H.R. 3403 would amend section 222 to add VoIP 911 service to the established 911 exceptions. H.R. 3403 would also provide additional protections for customer information by prohibiting a 911–database administrator from using information contained within the database that was supplied by an unaffiliated provider for competitive purposes unrelated to providing emergency services.

As demonstrated by the introduction of wireless and VoIP technologies, our Nation's emergency services infrastructure must continue to evolve. The next step in that evolution is the transition of the 911 infrastructure to an IP-enabled system. An Internet-based emergency network allows for greater flexibility in the types and amount of information that may be transmitted and shared by emergency services providers. This advancement will help resolve impediments that the disabled, in particular the deaf and hard of hearing, face when they try to access 911 and E–911 services. H.R. 3403 would facilitate this transition by requiring the development of a national plan for migration to a national IP-enabled emergency network and by amending an existing E–911 grant program to allow funding for PSAPs migrating to an IP-enabled emergency network.

#### **HEARINGS**

The Subcommittee on Telecommunications and the Internet held a legislative hearing on H.R. 3403 on Wednesday, September 19, 2007. The Subcommittee received testimony from Mr. Jason Barbour, ENP, President of the National Emergency Number Association; Ms. Catherine Avgiris, Senior Vice President and General Manager, Voice Services, Comcast Corporation; Mr. Robert Mayer, Vice President of Industry and State Affairs, United States Telecom Association; Mr. Christopher Putala, Executive Vice President of Public Policy, EarthLink, Inc.; and Mr. Craig W. Donaldson, Senior Vice President of Regulatory and Government Affairs, Intrado Incorporated.

#### COMMITTEE CONSIDERATION

On Wednesday, October 10, 2007, the Subcommittee on Telecommunications and the Internet met in open markup session and favorably forwarded H.R. 3403, amended, to the full Committee for consideration, by a voice vote. On Tuesday, October 30, 2007, the full Committee met in open markup session and ordered H.R. 3403 favorably reported to the House, amended, by a voice vote, a quorum being present.

#### COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list the record votes on the motion to report legislation and amendments thereto. There were no record votes taken on amendments or in connection with ordering H.R. 3403 reported. A motion by Mr. Dingell to order H.R. 3403 favorably reported to the House, amended, was agreed to by a voice vote.

#### COMMITTEE OVERSIGHT FINDINGS

Regarding clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Subcommittee on Telecommunications and the Internet held a legislative hearing on September 19, 2007, and the oversight findings of the Committee are reflected in this report.

### STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

The purpose of H.R. 3403 is to ensure that consumers using VoIP service can access E-911 emergency services by giving VoIP providers access to the 911 infrastructure and by extending existing liability protections to VoIP service. It is also the purpose of H.R. 3403 to develop a national plan to move to an IP-enabled emergency network and alter an existing grant program to allow funding for IP-enabled emergency networks.

# NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

Regarding compliance with clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee finds that H.R. 3403 would result in no new or increased budget authority, entitlement authority, or tax expenditures or revenues.

# EARMARKS AND TAX AND TARIFF BENEFITS

Regarding compliance with clause 9 of rule XXI of the Rules of the House of Representatives, H.R. 3403 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(d), 9(e), or 9(f) of rule XXI.

#### COMMITTEE COST ESTIMATE

The Committee adopts as its own the cost estimate on H.R. 3403 prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

# CONGRESSIONAL BUDGET OFFICE ESTIMATE

Pursuant to clause 3(c)(3) of rule XIII of the Rules of the House of Representatives, the following is the cost estimate on H.R. 3403 provided by the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974:

U.S. Congress, Congressional Budget Office, Washington, DC, November 8, 2007.

Hon. JOHN D. DINGELL, Chairman, Committee on Energy and Commerce, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3403, the 911 Modernization and Public Safety Act of 2007.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susan Willie.

Sincerely,

ROBERT A. SUNSHINE (For Peter R. Orszag, Director).

Enclosure.

H.R. 3403—911 Modernization and Public Safety Act of 2007

Summary: H.R. 3403 would amend current law to require companies offering Voice-over-Internet-Protocol (VoIP) services to provide emergency 911 telephone service. The bill would direct the Federal Communications Commission (FCC) to develop regulations granting VoIP providers access to the network and systems needed to complete 911 or enhanced-911 calls. Enhanced-911 (E–911) service automatically associates a physical address with the calling party's telephone number. The bill also would direct the E–911 Implementation Coordination Office to create a plan for a transition to an emergency network that is Internet-based.

Based on information from the FCC, CBO estimates that implementing the bill would cost about \$1 million over the 2008–2012 period, assuming availability of the appropriated amounts. CBO expects that enacting the bill would not have a significant effect on direct spending or revenues.

H.R. 3403 contains several intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA), including limitations on the imposition and use of certain fees that state and local governments can levy on VoIP Services. CBO estimates that the costs of those provisions to state, local, and tribal governments would be small; while they would grow over time, they would not exceed the threshold established in UMRA (\$66 million in 2007, adjusted annually for inflation) in any of the first five years that the mandates are in effect.

H.R. 3403 would impose private-sector mandates, as defined in UMRA, on certain entities in the telecommunications industry. The bill would require entities that own the 911 components necessary to transmit VoIP emergency calls to allow VoIP providers full access to those components. CBO estimates that the direct cost of complying with this mandate would be small. The bill also would impose a mandate on certain consumers and third-party users of VoIP services by eliminating an existing right to seek compensation in court.

Because we lack information about the potential value of compensation in such cases, CBO has no basis for determining whether the aggregate cost of all the mandates in the bill would exceed the annual threshold for private-sector mandates (\$131 million in 2007,

adjusted annually for inflation).

Estimated cost to the Federal Government: Under FCC rules, VoIP providers were required to connect their customers to emergency 911 services by November 28, 2005. H.R. 3403 would codify this regulation. The bill also would require the E–911 Implementation Coordination Office to develop a plan to establish a national system for 911 communications that is Internet-based.

Based on information provided by the FCC, CBO estimates that administrative costs for various rulemakings called for in the bill would cost about \$1 million in 2008. We estimate that planning for an emergency system that is Internet-based would cost less than

\$500,000 over the 2008-2012 period.

Enacting H.R. 3403 could increase federal revenues as the result of the collection of additional civil and forfeiture penalties assessed for violations of FCC laws and regulations. Collections of such penalties are recorded in the budget as revenues. CBO estimates that any additional revenues that would result from enacting H.R. 3403 would not be significant because of the relatively small number of cases likely to be involved.

Estimated impact on state, local, and tribal governments: H.R. 3403 contains several intergovernmental mandates as defined in the Unfunded Mandates Reform Act, including limitations on certain fees that state and local governments impose on VoIP services, and a preemption of state liability laws. CBO estimates that the costs of those provisions to state, local, and tribal governments would be small; while they would grow over time, they would not exceed the threshold established in UMRA (\$66 million in 2007, adjusted annually for inflation) in any of the first five years that the mandates are in effect.

## Limitations on Fees

The bill would prohibit state, local, and tribal governments from imposing fees on VoIP subscribers that exceed those imposed on the same class of subscribers (business or residential) of other telecommunications services. The bill also would require that intergovernmental entities spend 911 fees collected on VoIP services only

for support of emergency communications.

Thirteen states currently levy 911 fees on VoIP services. Nine of those states impose fees that are lower than or equal to the lowest fee charged on wireless and wireline services; CBO assumes that fees in those states would not be affected by the bill's limitation. One state currently charges a VoIP 911 fee that is higher than the residential wireline fee but lower than the business wireline fee, and presumably that state's fee on residential consumers of VoIP would be preempted by the bill. The remaining three states allow local governments to set fees; CBO cannot estimate the extent to which the bill would result in lost fees in those three states because information on the level of local fees is not readily available. We expect, however, that the costs to state and local governments from the bill's limitation on fees would likely be small because the number of VoIP users in those four states is not likely to be large, and local governments are not likely to levy fees on VoIP users that are significantly different from those levied on the same class of users of other telecommunications services.

It also is possible that some state and local governments might impose such fees at a rate higher than those charged on other telephone services, but CBO has no information upon which to make such a judgment at this time. Most states impose 911 fees on wireline and wireless services that are similar, suggesting that such fees on VoIP also would be similar. In total, CBO estimates that the costs to state and local governments from the bill's limitation on fees, while they might grow over time, would likely be small over the next five years.

The most recent data available indicate that four states use 911 fees, including wireless and wireline fees, for purposes other than 911 or emergency communications services. Two of those states currently levy 911 fees on VoIP and would be prevented by the bill from using those fees for nonemergency communications purposes. One additional state that currently has a 911 fee on VoIP allows counties and local governments to collect and use those revenues. CBO cannot estimate the extent to which counties and local governments use that revenue for nonemergency communications purposes because that information is not maintained by the states. CBO believes, however, that the costs to state and local governments from the bill's limitation on the use of fees, while they also might grow over time, would likely be small over the next five years.

Preemption of State Liability Laws and Requirements on Public Safety Access Points (PSAPs)

The bill would preempt state liability laws covering PSAPs and other governmental entities that answer 911 calls connected using VoIP. This provision would give PSAPs, a provider, or a user of VoIP the same protection from liability claims granted to wireless and wireline entities, and ultimately would benefit intergovernmental entities by protecting them from such claims.

Estimated impact on the private sector: H.R. 3403 contains private-sector mandates, as defined in UMRA, on certain entities in the telecommunications industry. The bill would require entities that own the 911 components necessary to transmit VoIP emergency calls to allow VoIP providers to have full access to those components. Owners of 911 components would be required to enter into such agreements, but they would be able to charge VoIP providers a fee for using their network components. Some small entities could incur costs to install equipment, but information from industry sources indicates that many entities already have the necessary equipment in place. Thus, CBO expects that the direct costs of complying with this mandate would be minimal.

The bill also would impose a private-sector mandate on certain consumers and third-party users of VoIP services by eliminating an existing right to seek compensation for injury caused by negligent acts. The direct cost of the mandate would be the forgone net value of any awards and settlements in such claims. CBO has found no pending lawsuit with a claim that would be barred by the bill and has no basis for estimating the number of claims that would be filed in the future in absence of this legislation. Furthermore, CBO has no basis for predicting the level of potential damage awards in such cases, if any. Thus, CBO cannot estimate the cost of this mandate or whether the aggregate cost of all the mandates in the bill

would exceed the annual threshold for private-sector mandates

(\$131 million in 2007, adjusted annually for inflation).

Previous CBO estimate: On May 25, 2007, CBO transmitted an estimate for S. 428, the IP-Enabled Voice Communications and Public Safety Act of 2007, as ordered reported by the Senate Committee on Commerce, Science, and Transportation on April 25, 2007, H.R. 3403 and S. 428 are similar, and the cost estimates are the same.

Estimate prepared by: Federal Costs: Susan Willie; Impact on State, Local, and Tribal Governments: Elizabeth Cove; Impact on the Private Sector: MarDestinee Perez.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

### FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates regarding H.R. 3403 prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

#### ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act were created by this legislation.

#### CONSTITUTIONAL AUTHORITY STATEMENT

Pursuant to clause 3(d)(1) of rule XIII of the Rules of the House of Representatives, the Committee finds that the Constitutional authority for this legislation is provided in Article I, section 8, clause 3, which grants Congress the power to regulate commerce with foreign nations, among the several States, and with the Indian tribes.

#### APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act of 1995.

#### SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short title

Section 1 establishes the short title of the Act as the "911 Modernization and Public Safety Act of 2007".

TITLE I—911 SERVICES AND IP-ENABLED VOICE SERVICE PROVIDERS

Section 101. Duty to provide 911 and E-911 service

Section 101 amends the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b) and would redesignate section 6 as section 7 and add a new section 6.

New subsection 6(a) would obligate every IP-enabled voice service provider to provide 911 and E-911 service in accordance with the Commission requirements in effect on the date of enactment of H.R. 3403 as such requirements may be modified by the Commission from time to time. New subsection 6(a) is not intended to re-

verse the Commission's actions to date concerning the duty of VoIP providers to provide 911 and E-911 services. The Commission's General Counsel has supplied the Committee with a letter, which has been made part of the record, stating that the Commission's existing regulations fully implement the duty of VoIP providers to provide 911 and E-911 services, and the Committee is satisfied by the Commission's statement in this regard. Should changes in the marketplace or in technology merit, the Committee expects that the Commission will reexamine its regulations as necessary, consistent with the Commission's general authority under section 1 of the Communications Act of 1934 to promote the "safety of life and property" through the use of wire and radio communications.

New subsection 6(b) would give VoIP providers, when they seek access to the capabilities needed to provide 911 and E-911 service from any entity with ownership or control over those capabilities, the same rights, including rights of interconnection, and on the same rates, terms, and conditions as would be applicable to providers of commercial mobile service (also referred to herein as wireless service), subject to regulations promulgated by the Commission

under new subsection 6(c).

The rights new subsection 6(b) affords to VoIP providers, including the rights of interconnection, are for the sole purpose of transmitting, delivering, and completing 911 and E-911 calls and associated E-911 information and for no other purpose, consistent with the limited purposes of H.R. 3403. The phrase "including rights of interconnection" makes clear that, to the extent that wireless carriers have rights of interconnection with entities that own or control the capabilities needed to provide 911 and E-911 service, VoIP providers have interconnection rights commensurate with those of wireless carriers as established by the Commission for the sole purpose of transmitting, delivering, and completing 911 and E-911 calls and associated E-911 information. H.R. 3403 is not intended to abrogate existing commercial arrangements relating to the provision of 911 and E-911 service entered into by VoIP providers prior to the enactment of H.R. 3403. H.R. 3403 does not give VoIP providers a right of access to the 911 infrastructure beyond what is needed to transmit, deliver, and complete 911 and E-911 calls and associated E-911 information.

New subsection 6(c) would require the Commission to issue regulations implementing H.R. 3403 within 90 days of the date of enactment. Such regulations shall ensure that VoIP providers have the ability to exercise the rights granted under new subsection 6(b). New subsection 6(c) would require the Commission to promulgate regulations that take into account any technical, network security, or information privacy requirements specific to VoIP service. It would further require that any such capabilities that VoIP, but not wireless, providers need to provide 911 and E-911 services are made available at the same rates, terms, and conditions as if such capabilities were made available to wireless carriers. Such regulations should not confer a right to capabilities that are more than what is needed to enable a VoIP provider to transmit, deliver, and complete 911 and E-911 calls and associated E-911 information or give VoIP providers access to capabilities needed to transmit, deliver, and complete 911 and E-911 calls and associated E-911 information on better rates, terms, and conditions than such capabili-

ties would be made available to wireless carriers. New subsection 6(c) would direct the Commission to update its regulations in the

future as changes in the market or technology warrant.

The term "capabilities" should be construed to include both those components that wireless carriers use to provide 911 and E-911 service that VoIP providers also need to provide 911 and E-911 service and those components that VoIP providers need to provide 911 and E-911 service that wireless carriers do not need because of differences in the ways that wireless carriers and VoIP providers transmit, deliver, and complete 911 and E-911 calls and related E-911 information. In promulgating regulations, the Commission should therefore consider equipment; interfaces, such as PSAP interface and integration capabilities; networks, such as Emergency Service Numbers, Emergency Service Query Keys, and Emergency Service Routing Numbers; selective routers; trunklines; nondialable pseudo automatic number identification numbers (p-ANIs); facilities, including access to voice and data communication ports; databases; and other components only to the extent that any of these are needed to support the seamless transmission, delivery, and completion of 911 and E-911 calls and associated E-911 information.

The term "any entity" should be broadly construed because critical components of the 911 infrastructure may reside with an in-

cumbent carrier, a PSAP, or some other entity.

When developing its regulations, the Commission should account for existing differences in the emergency services infrastructure, including differences in the technical capabilities of PSAPs. The Commission should also reexamine its existing regulations and make any necessary changes to comply with H.R. 3403, which include, but are not limited to, ensuring that VoIP providers that have a duty to provide 911 and E–911 services but are not competitive LECs have direct access to p-ANIs.

The Commission should take into account technical feasibility as it implements the provisions of H.R. 3403, particularly for nascent technologies such as mobile VoIP service. Mobile VoIP service is a version of nomadic VoIP service that permits a consumer using a wireless phone to bypass the traditional cellular network and send or receive data using Internet protocol services. As mobile VoIP develops into a full-fledged, widely-used service, providers should strive to use E-911 technologies that comply with the same accu-

racy standards as wireless services.

Under new subsection 6(c), the Commission should address technical or architectural differences between the services and networks of VoIP providers and the services and networks of wireless carriers. The regulations should adhere to the basic tenet established in new subsection 6(b) that the rights given to VoIP providers in H.R. 3403 are for the sole purpose of transmitting, delivering, and completing 911 and E–911 calls and associated E–911 information and do not extend beyond a right of access only to the 911 infrastructure needed to transmit, deliver, and complete 911 and E–911 calls and associated E–911 information.

New subsection 6(d) would permit the Commission to delegate to States enforcement of regulations implementing new subsection 6(c). It would also clarify that nothing in this section is intended to alter existing State authority over emergency communications,

provided that the exercise of that authority is not inconsistent with Federal law or Commission requirements.

New subsection 6(e) would provide that nothing in H.R. 3403 be construed to permit the Commission to require or impose a specific technology or technology standard. The Commission may, however, adopt technology-neutral, performance-based standards or requirements. New subsection 6(e) would also require that any violations of this section or the regulations adopted by the Commission thereunder be considered a violation of the Communications Act of 1934,

or a regulation promulgated under that Act, respectively.

New subsection 6(f) would provide that nothing in H.R. 3403, the Communications Act of 1934, or any Commission regulation or order prevents States or their political subdivisions from imposing or collecting 911 or E–911 fees, so long as those fees are obligated or spent in support of 911 or E–911 services and do not exceed fees imposed or collected from other telecommunications service providers for specific classes of customers. For example, if a State or its political subdivision imposes a 911 fee on wireless or wireline carriers that consists of one rate for residential customers and another rate for business customers, the State or its political subdivision may collect no more from VoIP providers for the same classes of customers.

New subsection 6(f) would also provide that fees collected by States or their political subdivisions may only be used for 911 or E-911 services, or enhancements of such services, as specified in the law adopting the fee. States and their political subdivisions should use 911 or E-911 fees only for direct improvements to the 911 system. Such improvements could include improving the technical and operational aspects of PSAPs; establishing connections between PSAPs and other public safety operations, such as a poison control center; or implementing the migration of PSAPs to an IP-enabled emergency network. This provision is not intended to allow 911 or E-911 fees to be used for other public safety activities that, although potentially worthwhile, are not directly tied to the operation and provision of emergency services by the PSAPs. The Committee also encourages States and their political subdivisions to apply 911 fees equitably to providers of different types of communications services to the extent possible. In particular, the Committee urges States and their political subdivisions, when adopting 911 and E-911 fees, to examine fee structures that accommodate pre-paid telecommunications services.

New subsection 6(f) would also require the Commission to submit an annual report to Congress on the status of the collection and distribution of 911 and E–911 fees by States and their political subdivisions, including whether fees were used for the purposes speci-

fied by each State.

New subsection 6(g) would authorize the Commission to compile and make available information about PSAPs and 911 components to assist VoIP providers in complying with the requirements of H.R. 3403 if the availability of such information would improve public safety. Such information may include PSAP contact information, contact information for providers of selective routers, testing procedures, classes and types of services supported by PSAPs, or other information concerning 911 elements that the Commission concludes would assist VoIP providers in complying with this sec-

tion. New subsection 6(g) would permit the Commission to give such information only to wireline carriers, wireless carriers, VoIP providers, other emergency services providers, or the vendors to, or agents of, any such carriers or providers. The Commission should make such information available in a manner that protects the security of the emergency services infrastructure. The Committee notes with approval a request from public safety representatives to establish a list of all emergency services providers, with a point of contact and contact information. The Committee believes such a list would be helpful to PSAPs and improve public safety and could be included in the Commission's implementation of new subsection

New subsection 6(h) would provide that nothing in H.R. 3403 be construed as altering, delaying, or otherwise limiting the ability of the Commission to enforce the rules adopted in the Commission's First Report and Order in WC Docket Nos. 04–36 and 05–196, as in effect on the date of enactment of the 911 Modernization and Public Safety Act of 2007, except as those rules are modified by the Commission from time to time. New subsection 6(h) would not grant additional enforcement authority to the Commission but instead would preserve the Commission's existing rules concerning the provision of 911 and E-911 services by VoIP providers, except as required to be modified by the provisions of H.R. 3403.

New section 7, as redesignated by H.R. 3403, would add a definition of "IP-enabled voice service" that is tied to the Commission's definition of "interconnected VoIP service" at 47 C.F.R. 9.3. The Committee recognizes that new technologies or successor protocols may enter the marketplace. As these new technologies or successor protocols become widely accepted and fungible substitutes for telephony, the Committee recognizes that the Commission may need to modify its definition from time to time.

#### Section 102. Migration to IP-enabled emergency network

Section 102 amends section 158 of the National Telecommunications and Information Organization Act (47 U.S.C. 942) to allow the use of 911 PSAP grant funds for migration to IP-enabled emergency networks. It also amends section 158 to require the E-911 Coordination and Implementation Office to report to Congress within 270 days of the date of enactment of H.R. 3403 on a national plan for migrating to a national IP-enabled emergency net-

Section 102 sets forth specific requirements for what should be included in the plan and requires the E-911 Implementation Coordination Office to consult with representatives from public safety, groups representing those with disabilities, technology and telecommunications providers, VoIP providers, telecommunications relay service providers, and other emergency communications service providers as appropriate. H.R. 3403 does not define the term "national IP-enabled emergency network" because this definition should be developed as part of creating the national plan.

The national plan required by section 102 should address the potential benefits of an IP-enabled emergency network. It should also examine the costs and potential savings of an IP-enabled emergency network and provide recommendations for legislative changes, including specific legislative language. The report should examine the experiences of PSAPs and public safety officials that conduct trial deployments of IP-enabled emergency networks and analyze efforts to provide automatic location for E–911 purposes.

The E–911 Implementation Coordination Office should also ex-

The E-911 Implementation Coordination Office should also examine and explain how the migration plan will incorporate solutions for providing 911 and E-911 access to people with disabilities. Certain people with disabilities may not be able to speak to or hear an emergency operator and the report should consider ways to address this issue.

The report should also include an examination of the technical requirements for transitioning to a national IP-enabled emergency network. This includes examining the need for new, modified, or expanded capabilities of existing technologies. The report should also identify the various systems integral to PSAP operation and performance, the interaction between PSAPs, and what changes or modifications would be required to move PSAPs to an IP-enabled emergency network. This would include changes or modifications to computer-aided dispatch, radio dispatch, records management systems, incident management systems, geographic information systems, access to external databases or systems necessary to support the effective management of IP-enabled 911 and E-911 calls, and other information related to emergency services.

#### Section 103. Technical amendments

Section 103 would correct a technical error in section 2301 of Public Law 110–53. Section 103 amends section 3011(b) of the Digital Television Transition and Public Safety Act of 2005 (Public Law 109–171; 47 U.S.C. 309 note), and section 158(b)(4) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 942(b)(4)) by striking "the 911 Modernization Act" and inserting "the 911 Modernization and Public Safety Act of 2007". This technical correction would allow NTIA to use its borrowing authority in Public Law 110–53 to fund a grant program contained in the Enhance 911 Act of 2004, which funds upgrades to the emergency services system.

#### TITLE II—PARITY OF PROTECTION

#### Section 201. Liability

Section 201 amends the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615a) to provide liability protection for VoIP providers, other emergency communications service providers, public safety officials, and end users relating to the provision and use of VoIP 911 and E–911 service and other emergency communications services that is equivalent to the liability protection that wireline and wireless carriers, public safety officials, and end users have with respect to the provision and use of wireline and wireless 911 and E–911 service.

Section 201 also adds two definitions to the Wireless Communications and Public Safety Act of 1999. The term "other emergency communications service" is defined as emergency information that is provided to a PSAP via wireline or wireless communications, and may include 911 and E–911 services. Such services could include the provision of data and video information that is designed to improve the ability of first responders to react to emergencies. The

term "other emergency communications service provider" means an entity required by the Commission to provide other emergency communications services or, in the absence of a Commission requirement, an entity that voluntarily elects to provide other emergency communications services and is authorized by the appropriate State or local governing authority to provide such services.

Providers of new and innovative emergency services should be able to freely enter the emergency communications market. The requirement that other emergency communications service providers be authorized by the appropriate State or local governing authority should not be a barrier to providing such services. State or local governing authorities should strive to provide a broad array of options for authorizing legitimate emergency communications service providers, consistent with its public safety needs and ability to oversee such service offerings. For example, it would be appropriate for State or local authorities to use, for authorization purposes, compliance with standards established by national emergency service groups such as the National Emergency Number Association, the National Association of State 9-1-1 Administrators, or the Association of Public-Safety Communications Officials.

#### TITLE III—AUTHORITY TO PROVIDE CUSTOMER INFORMATION FOR 911 PURPOSES

#### Section 301. Authority to provide customer information

Section 301 amends section 222 of the Communications Act of 1934 and would add IP-enabled voice services to the list of Customer Proprietary Network Information exceptions in section 222, so that VoIP providers may give customer information, including location information, to the appropriate PSAP in an emergency. Section 301 would also prohibit administrators of 911 databases from using for competitive purposes data obtained from unaffiliated telecommunications carriers or VoIP providers in the course of maintaining and operating such databases. Unaffiliated voice service providers are required to provide certain information about their customers, including location information, to 911 database administrators for the 911 system to function. Administrators of 911 databases should not use that information for other purposes that are unrelated to the provision of emergency services.

Nothing in section 301, however, is intended to prohibit government agencies, including appropriate State agencies, otherwise authorized by law from requesting information contained in any such database. Federal or State agencies may wish to examine such information to assist their decision-making. If an agency decides to request such information, then the database administrator should provide the information to the agency in a usable format and as expeditiously as possible to allow the agency to fulfill its duties. This provision should be construed broadly to allow agencies to access

such information if they are permitted to do so by law.

## CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

### WIRELESS COMMUNICATIONS AND PUBLIC SAFETY ACT OF 1999

\* \* \* \* \* \* \*

#### SEC. 4. [PARITY OF PROTECTION FOR PROVISION OR USE OF WIRE-LESS SERVICE] SERVICE PROVIDER PARITY OF PROTEC-TION.

- (a) Provider Parity.—A [wireless carrier,] wireless carrier, IPenabled voice service provider, or other emergency communications provider, and [its officers] their officers, directors, employees, vendors, and agents, shall have immunity or other protection from liability in a State of a scope and extent that is not less than the scope and extent of immunity or other protection from liability that any local exchange company, and its officers, directors, employees, vendors, or agents, have under Federal and State law (whether through statute, judicial decision, tariffs filed by such local exchange company, or otherwise) applicable in such State, including in connection with an act or omission involving the release to a PSAP, emergency medical service provider or emergency dispatch provider, public safety, fire service or law enforcement official, or hospital emergency or trauma care facility of subscriber information related to [emergency calls or emergency services] emergency calls, emergency services, or other emergency communications serv-
- (b) USER PARITY.—A person [using wireless 9–1–1 service shall] using wireless 9–1–1 service, or making 9–1–1 communications via IP-enabled voice service or other emergency communications service, shall have immunity or other protection from liability of a scope and extent that is not less than the scope and extent of immunity or other protection from liability under applicable law in similar circumstances of a person using 9–1–1 service [that is not wireless] that is not via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications service.
- (c) PSAP PARITY.—In matters related to [wireless 9–1–1 communications, a PSAP] 9–1–1 communications via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications service, a PSAP, and its employees, vendors, agents, and authorizing government entity (if any) shall have immunity or other protection from liability of a scope and extent that is not less than the scope and extent of immunity or other protection from liability under applicable law accorded to such PSAP, employees, vendors, agents, and authorizing government entity, respectively, in matters related to 9–1–1 communications [that are not wireless] that are not via wireless 9–1–1 service, IP-enabled voice service, or other emergency communications service.

\* \* \* \* \* \* \*

## SEC. 6. DUTY TO PROVIDE 911 AND E-911 SERVICE.

(a) DUTIES.—It shall be the duty of each IP-enabled voice service provider to provide 911 service and E-911 service to its subscribers in accordance with the requirements of the Federal Communications Commission (in this section referred to as the "Commission"), as in effect on the date of enactment of the 911 Modernization and Public

Safety Act of 2007 and as such requirements may be modified by

the Commission from time to time.

(b) Parity for IP-Enabled Voice Service Providers.—An IPenabled voice service provider that seeks capabilities from an entity with ownership or control over such capabilities to comply with its obligations under subsection (a) shall, for the exclusive purpose of complying with such obligations, have the same rights, including rights of interconnection, and on the same rates, terms, and conditions, as apply to a provider of commercial mobile service (as such term is defined in section 332(d) of the Communications Act of 1934 (47 U.S.C. 332(d))), subject to such regulations as the Commission prescribes under subsection (c).

(c) REGULATIONS.—The Commission—

(1) within 90 days after the date of enactment of the 911 Modernization and Public Safety Act of 2007, shall issue regulations implementing such Act, including regulations that-

(A) ensure that IP-enabled voice service providers have the ability to exercise their rights under subsection (b);

(B) take into account any technical, network security, or information privacy requirements that are specific to IP-en-

abled voice services; and

(C) provide, with respect to any capabilities that are not required to be made available to a commercial mobile service provider but that the Commission determines under subparagraph (B) of this paragraph or paragraph (2) are necessary for an IP-enabled voice service provider to comply with its obligations under subsection (a), that such capabilities shall be available at the same rates, terms, and conditions as would apply if such capabilities were made available to a commercial mobile service provider; and

(2) may modify these requirements from time to time, as necessitated by changes in the market or technology, to ensure the ability of an IP-enabled voice service provider to comply with its

obligations under subsection (a).

(d) Delegation of Enforcement to State Commissions.—The Commission may delegate authority to enforce the regulations issued under subsection (c) to State commissions or other State agencies or programs with jurisdiction over emergency communications. Nothing in this section is intended to alter the authority of State commissions or other State agencies with jurisdiction over emergency communications, provided that the exercise of such authority is not inconsistent with Federal law or Commission requirements.

#### (e) Implementation.—

(1) Limitation.—Nothing in this section shall be construed to permit the Commission to issue regulations that require or im-

pose a specific technology or technology standard.
(2) Enforcement.—The Commission shall enforce this section as if this section was a part of the Communications Act of 1934. For purposes of this section, any violations of this section, or any regulations promulgated under this section, shall be considered to be a violation of the Communications Act of 1934 or a regulation promulgated under that Act, respectively.

(f) STATE AUTHORITY OVER FEES.—

- (1) Authority.—Nothing in this Act, the Communications Act of 1934 (47 U.S.C. 151 et seq.), the 911 Modernization and Public Safety Act of 2007, or any Commission regulation or order shall prevent the imposition and collection of a fee or charge applicable to commercial mobile services or IP-enabled voice services specifically designated by a State, political subdivision thereof, or Indian tribe for the support or implementation of 911 or E-911 services, provided that the fee or charge is obligated or expended only in support of 911 and E-911 services, or enhancements of such services, as specified in the provision of State or local law adopting the fee or charge. For each class of subscribers to IP-enabled voice services, the fee or charge may not exceed the amount of any such fee or charge applicable to the same class of subscribers to telecommunications services.
- (2) FEE ACCOUNTABILITY REPORT.—To ensure efficiency, transparency, and accountability in the collection and expenditure of fees for the support or implementation of 911 or E-911 services, the Commission shall submit a report within 1 year after the date of enactment of the 911 Modernization and Public Safety Act of 2007, and annually thereafter, to the Committee on Commerce, Science and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives detailing the status in each State of the collection and distribution of 911 fees, and including findings on the amount of revenues obligated or expended by each State or political subdivision thereof for any purpose other than the purpose for which any fee or charges are presented.
  (g) AVAILABILITY OF PSAP INFORMATION.—The Commission may

compile a list of public safety answering point contact information, contact information for providers of selective routers, testing procedures, classes and types of services supported by public safety answering points, and other information concerning 911 elements, for the purpose of assisting IP-enabled voice service providers in complying with this section, and may make any portion of such information available to telecommunications carriers, wireless carriers, IP-enabled voice service providers, other emergency service providers, or the vendors to or agents of any such carriers or providers,

if such availability would improve public safety.

(h) Rule of Construction.—Nothing in the 911 Modernization and Public Safety Act of 2007 shall be construed as altering, delaying, or otherwise limiting the ability of the Commission to enforce the rules adopted in the Commission's First Report and Order in WC Docket Nos. 04-36 and 05-196, as in effect on the date of enactment of the 911 Modernization and Public Safety Act of 2007, except as such rules may be modified by the Commission from time to time.

### SEC. [6.] 7. DEFINITIONS.

As used in this Act:

(1) \* \* \*

(8) IP-ENABLED VOICE SERVICE.—The term "IP-enabled voice service" has the meaning given the term "interconnected VoIP service" by section 9.3 of the Federal Communications Commis-

sion's regulations (47 CFR 9.3).

(9) OTHER EMERGENCY COMMUNICATIONS SERVICE.—The term "other emergency communications service" means the provision of emergency information to a public safety answering point via wire or radio communications, and may include 911 and enhanced 911 services.

(10) OTHER EMERGENCY COMMUNICATIONS SERVICE PRO-VIDER.—The term "other emergency communications service pro-

vider" means—

(A) an entity other than a local exchange carrier, wireless carrier, or an IP-enabled voice service provider that is required by the Federal Communications Commission consistent with the Commission's authority under the Communications Act of 1934 to provide other emergency communications services; or

(B) in the absence of a Commission requirement as described in subparagraph (A), an entity that voluntarily elects to provide other emergency communications services and is specifically authorized by the appropriate local or State 911 governing authority to provide other emergency communications services.

communications services.

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION ORGANIZATION ACT

TITLE I—NATIONAL TELECOMMUNI-CATIONS AND INFORMATION ADMIN-ISTRATION

PART C—SPECIAL AND TEMPORARY PROVISIONS

SEC. 158. COORDINATION OF E-911 IMPLEMENTATION.

- (a) \* \* \*
- (b) Phase II E-911 Implementation Grants.—
  - (1) MATCHING GRANTS.—The Assistant Secretary and the Administrator, after consultation with the Secretary of Homeland Security and the Chairman of the Federal Communications Commission, and acting through the Office, shall provide grants to eligible entities for the implementation and operation of Phase II E-911 services and for migration to an IP-enabled emergency network.

\* \* \* \* \* \* \*

(4) Criteria.—The Assistant Secretary and the Administrator shall jointly issue regulations within 180 days after the

date of enactment of the ENHANCE 911 Act of 2004, after a public comment period of not less than 60 days, prescribing the criteria for selection for grants under this section, and shall update such regulations as necessary. The criteria shall include performance requirements and a timeline for completion of any project to be financed by a grant under this section. Within 180 days after the date of enactment of [the 911 Modernization Act] the 911 Modernization and Public Safety Act of 2007, the Assistant Secretary and the Administrator shall jointly issue regulations updating the criteria to allow a portion of the funds to be used to give priority to grants that are requested by public safety answering points that were not capable of receiving 911 calls as of the date of enactment of that Act, for the incremental cost of upgrading from Phase I to Phase II compliance. Such grants shall be subject to all other requirements of this section.

\* \* \* \* \* \* \* \*

(d) Migration Plan Required.—

(1) National plan required.—No more than 270 days after the date of the enactment of the 911 Modernization and Public Safety Act of 2007, the Office shall develop and report to Congress on a national plan for migrating to a national IP-enabled emergency network capable of receiving and responding to all citizen-activated emergency communications and improving information sharing among all emergency response entities.

(2) CONTENTS OF PLAN.—The plan required by paragraph (1) shall—

(A) outline the potential benefits of such a migration;

(B) identify barriers that must be overcome and funding mechanisms to address those barriers;

(C) include a proposed timetable, an outline of costs, and potential savings;

(D) provide specific legislative language, if necessary, for achieving the plan;

(E) provide recommendations on any legislative changes, including updating definitions, to facilitate a national IP-enabled emergency network;

(F) assess, collect, and analyze the experiences of the public safety answering points and related public safety authorities who are conducting trial deployments of IP-enabled emergency networks as of the date of enactment of the 911 Modernization and Public Safety Act of 2007;

(G) identify solutions for providing 911 and E-911 access to those with disabilities and needed steps to implement such solutions, including a recommended timeline; and

(H) analyze efforts to provide automatic location for E–911 purposes and recommendations on regulatory or legislative changes that are necessary to achieve automatic location for E–911 purposes.

(3) Consultation.—In developing the plan required by paragraph (1), the Office shall consult with representatives of the public safety community, groups representing those with disabilities, technology and telecommunications providers, IP-enabled voice service providers, Telecommunications Relay Service

providers, and other emergency communications providers and others it deems appropriate. [(d)] (e) AUTHORIZATION; TERMINATION.— (1) \* \* \* [(e)] (f) DEFINITIONS.—As used in this section: (1) \* SECTION 3011 OF THE DIGITAL TELEVISION TRANSITION AND PUBLIC SAFETY ACT OF 2005 SEC. 3011. ENHANCE 911. (a) \* \* \* (b) CREDIT.—The Assistant Secretary may borrow from the Treasury, upon enactment of [the 911 Modernization Act] the 911 Modernization and Public Safety Act of 2007, such sums as necessary, but not to exceed \$43,500,000, to implement this section. The Assistant Secretary shall reimburse the Treasury, without interest, as funds are deposited into the Digital Television Transition and Public Safety Fund. COMMUNICATIONS ACT OF 1934 TITLE II—COMMON CARRIERS PART I—COMMON CARRIER REGULATION \* SEC. 222. PRIVACY OF CUSTOMER INFORMATION. (a) \* \* \* (d) Exceptions.—Nothing in this section prohibits a telecommunications carrier from using, disclosing, or permitting access to customer proprietary network information obtained from its customers, either directly or indirectly through its agents-(1) \* \* \*(4) to provide call location information concerning the user of a commercial mobile service (as such term is defined in section 332(d)) or the user of an IP-enabled voice service (as such term is defined in section 7 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b))— (A) \* (f) AUTHORITY TO USE [WIRELESS] LOCATION INFORMATION.—For

purposes of subsection (c)(1), without the express prior authorization of the customer, a customer shall not be considered to have ap-

proved the use or disclosure of or access to—

(1) call location information concerning the user of a commercial mobile service (as such term is defined in section 332(d)) or the user of an IP-enabled voice service (as such term is defined in section 7 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b)), other than in accordance with subsection (d)(4); or

\* \* \* \* \* \* \* \*

(g) SUBSCRIBER LISTED AND UNLISTED INFORMATION FOR EMERGENCY SERVICES.—[Notwithstanding subsections (b)]

(1) In General.—Notwithstanding subsections (b), (c), and (d), a telecommunications carrier that provides telephone exchange service or a provider of IP-enabled voice service (as such term is defined in section 7 of the Wireless Communications and Public Safety Act of 1999 (47 U.S.C. 615b)) shall provide information described in subsection (i)(3)(A) (including information pertaining to subscribers whose information is unlisted or unpublished) that is in its possession or control (including information pertaining to subscribers of other carriers) on a timely and unbundled basis, under nondiscriminatory and reasonable rates, terms, and conditions to providers of emergency services, and providers of emergency support services, solely for purposes of delivering or assisting in the delivery of emergency services.

(2) Prohibited use of location information databases.— No administrator of any database used for the purpose of facilitating the provision of emergency services may use for any competitive purpose data obtained from unaffiliated telecommunications carriers or IP-enabled voice service providers in the course of maintaining and operating that database. Nothing in this section is intended to prohibit government agencies otherwise authorized under law from requesting information con-

tained in any such database.

\* \* \* \* \* \* \*

# **Attachment B**

Letter from Ronald W. Del Sesto, Jr., counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (filed July 11, 2008) ("Vonage Capabilities Ex Parte")

# BINGHAM

Ronald W. Del Sesto, Jr. Direct Phone: 202.373.6023 Direct Fax: 202.373.6001 r.delsesto @bingham.com

July 11, 2008

# **VIA ELECTRONIC FILING**

Ms. Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, DC 20554

Re: Notice of Ex Parte Communication; In the Matter of IP-Enabled Services, WC Docket No. 04-36; E911 Requirements for IP Enabled Service Providers, WC Docket No. 05-196

Dear Ms. Dortch:

On July 10, 2008, Brendan Kasper, Senior Regulatory Counsel and Stephen Seitz, Vice President Regulatory Affairs of Vonage Holdings Corp., and Tamar Finn of Bingham McCutchen LLP met with Wireline Competition Bureau ("WCB") staff Nicholas Alexander and R. Matthew Warner and Public Safety and Homeland Security Bureau staff Erika Olsen and David Munson. Separately, the participants met with Amy Bender, Acting Legal Advisor to Chairman Kevin J. Martin, John Hunter, Special Counsel to Commissioner Robert M. McDowell and Greg Orlando, Legal Advisor to Commissioner Deborah Taylor Tate.

The participants discussed the attached handouts at each meeting.

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Sincerely yours,

Ronald W. Del Sesto, Jr.

cc (by e-mail):
Nicholas Alexander
Matthew Warren
Erika Olsen
David Munson
Amy Bender
John Hunter
Greg Orlando

Enclosures

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# Capabilities Used to Provide Interconnected VoIP E911 Service and CMS Parity

# **Executive Summary**

The NET 911 Improvement Act of 2008 (the Act) requires the Federal Communications Commission (FCC or Commission) to adopt regulations that grant interconnected VoIP providers (IVPs) rights to access enhanced 911 (E911) capabilities necessary to provide E911 service to their customers. The Act also grants IVPs the right to such access on the same rates, terms, and conditions that are provided to a commercial mobile service (CMS) provider. This document defines the term "capabilities" and summarizes the capabilities currently used in the provision of E911 services by IVPs. Next, the definition of "CMS Parity" is discussed. Finally, additional VoIP E911 implementation issues are addressed.

The Commission should develop regulations that support the transition to open standards and open networks, both of which should be forward-looking. IVPs should be given direct access on a non-discriminatory basis to inputs and information needed to provide E911 service to customers. A transparent process with efficient dispute resolution mechanisms is critical to successful E911 implementation. Because nationwide E911 deployment is not static and the capabilities used to provide VoIP E911 service will change as technology advances, the Commission should develop regulations that facilitate an IVP's ability to provide E911 service without dictating or restricting the capabilities to which IVPs require access.

# I. Definition of Capabilities

The Commission should define "capabilities" broadly to include interconnection, elements, services, testing, agreements, and any features necessary to an IVP's provision of E911 service. The Commission should adopt a non-exhaustive list of capabilities.

# II. E911 Elements Necessary to the Provision of VoIP E911

# 1) ESQKs/p-ANIs

An Emergency Services Query Key (ESQK, also called Pseudo Automatic Number Identification (p-ANI)) is a digit string that uniquely identifies an ongoing emergency services call and is used to correlate the emergency services call with the associated data messages. It may also identity an emergency services zone and may be used to route the call through the network. IVPs require access to the appropriate system or systems used to provision the ESQK or p-ANI pool for the selective router and the ALI database that serves a particular PSAP's operations. IVPs also request cooperation of the various PSAPs for the creation of the appropriate records in the Master Street Address Guide (MSAG, see discussion below) in order to provision the p-ANI pool. p-ANI availability is an essential element for nomadic VoIP E911 deployment. Many E911 selective routers use 25-year old technology that is capable of processing no more than a few specific area codes (those area codes traditionally used in nearby areas) or none at all. As a result, p-ANIs are necessary to route a non-regional telephone number through the local selective router. IVPs cannot obtain p-ANI resources directly. Where p-ANI inputs are unavailable, nomadic VoIP E911 calls face significant routing challenges. IVPs, therefore, require a standardized system to obtain p-ANI resources from ILECs or directly from a numbering administrator. The quantity of p-ANI numbers required would be determined by projected IVP call volume for each PSAP.

The Alliance for Telecommunications Industry Solutions (ATIS) and the North American Numbering Council (NANC) adopted p-ANI guidelines for the administration and assignment of non-

dialable p-ANI numbers. Interim guidelines (and an interim administrator--Neustar) were adopted and instituted in 2006. The ATIS and NANC permanent guidelines were provided to the FCC in April 2007 for final consideration (the adopted guidelines are available at: <a href="http://www.fcc.gov/wcb/cpd/Nanc/nanccorr.html">http://www.fcc.gov/wcb/cpd/Nanc/nanccorr.html</a>). They will not go into effect until the FCC provides direction on the technical requirements document, selects a permanent numbering administrator, and issues any applicable order implementing them. Under the present p-ANI guidelines IVPs are not directly granted ESQKs, a vital resource to the interconnection of IVPs to the native 911 network. The Commission should revise the guidelines and grant IVPs direct access to ESQKs to comply with the NET 911 Improvement Act of 2008.

#### 2) Real-Time ALI Database Access

An Automatic Location Identification (ALI) database relates a specific telephone number to an address. This database accepts a PSAP query with a telephone number and responds with a corresponding address. In the case of an ESQK/p-ANI, the ALI database "steers" the query to an appropriate IVP database and then steers the response back to the PSAP. ALI databases are typically owned by ILECs or PSAPs. Because IVPs must be able to process both "native" and "non-native" telephone numbers in any given geographic area, they require real-time access to the ALI database system to provide time-of-call updates. Database owners will need to provide requirements for the ALI update interface or ALI steering protocols in use by the ALI system.

# 3) Emergency Service Numbers

Emergency Service Numbers (ESNs) are typically three to five digit numbers representing a unique combination of emergency service agencies (Law Enforcement, Fire, and Emergency Medical Service) designated to serve a specific range of addresses within a particular geographical area, or Emergency Service Zone (ESZ). ESNs facilitate selective routing and selective transfer, if required, to the appropriate PSAP and dispatching of the proper service agencies. PSAPs that use ESNs can deploy hundreds or thousands of ESNs behind a single selective router for wireline carriers or IVP providers, but typically deploy only one ESN for wireless carriers. In areas where they are used, IVPs require ESNs in order to properly route E911 calls. IVPs need this E911 element to be created in ILEC systems on a PSAP-by-PSAP basis.

IVPs are blind to potential ILEC and PSAP ESN assignments and changes and must have access to the information necessary to route calls based on ESNs. In order to provide E911 service in ESN areas, IVPs need (1) continuously updated information about the number of ESNs per PSAP, and (2) continuously updated information about the geographic boundaries of an ESN.

# 4) Master Street Address Guides

IVPs require access to the various Master Street Address Guides (MSAGs) that are used throughout the country. An MSAG is used by a municipality or other entity to assign a particular police, fire, or rescue agency to a given street and number range. MSAG entries match the IVP customer's Registered Location to the assigned ESN for that location. IVPs need this E911 element to be created in ILEC systems on a PSAP-by-PSAP basis. The MSAG can be controlled by a variety of entities throughout the country. The FCC should make clear that IVPs should have direct access to MSAGs.

# 5) Shell Records

Following accepted E911 deployment practices, the established ALI database provider in each geographic area must construct and provide "shell records" (also called MSAG ledgers) for the PSAPs.

Shell records contain the customer's true telephone number and location information and must be transmitted to the PSAPs for the provision of effective E911 service. Shell records allow PSAPs to receive ANI and the Registered Location of the E911 caller. Shell records are used to associate the p-ANI with the IVP and the proper ESN, if required, for each E911 call. This E911 element must be created in the ILEC systems on a PSAP-by-PSAP basis. ILECs alone have access to the information (ESNs and/or MSAG) within their databases. Without access to that information, IVPs cannot create functional E911 databases. IVPs must submit the p-ANI and MSAG information to the ILEC for association to the corresponding shell records in the ILEC's own E911 database (which are maintained by its ALI provider), thereby allowing ALI "steering" to be enabled. Only after ILEC processing is completed will IVP E911 calls be properly "selectively routed" and inquiries from the PSAPs seeking Registered Location information for IVP customers be properly "steered" to correct IVP database. In order for the E911 system to work properly, the information in the ILEC database must match exactly the information in the IVP database. If the information does not match, a "failure to provision" error will occur and the E911 system will not operate properly.

#### **6)** Selective Router Interconnection

Selective routers are used to electronically route 911 emergency calls to the proper PSAP based on the ESN code that has been assigned to the caller's location. IVPs need direct interconnection to selective routers or the emergency services gateway (ESGW) that serves all of the selective routers or 911 tandems in a particular region.

In some regions, the ILEC has created a closed facility with a limited number of ports for "new" connections to the native 911 network. Instead of updating the facility, the LEC serves as a gatekeeper for PSAP traffic, limiting the number of competitors. The FCC should make clear that owners/operators of selective routers may not limit the number of ports into the native 911 network or act as a gatekeeper to the Selective Router.

### A) Voice Transport

IVPs require access to voice trunks in order to provide E911 service. This can be done through an arrangement for a trunk to an ESGW that serves multiple selective routers. Alternatively, IVPs need access to ordering information, locations and specifications for trunk types for each selective router in a particular geographic service area. SS7 trunk types are typically preferred, but IVPs should be given flexibility on the type of trunking arrangement they prefer. Some IVPs may want to order more than one trunk for each selective router in order to provide redundancy and diversity. IVPs may also want to obtain Internet access and a SIP gateway co-located with the selective router or 911 tandem.

# B) Data Transport

IVPs require access to data trunks in order to provide E911 service. For each ALI system in use in a service area, IVPs require ordering information, locations and specifications for data transport trunk types for each server, including any servers maintained at or by the PSAPs. Again, some IVPs may want to order two trunks to each of the ALI server locations, one each from two location diverse origination points.

# III. CMS Parity

The NET 911 Improvement Act of 2008 stipulates that IVPs have the right to access E911 capabilities, including interconnection, from those entities that own or control such capabilities, on the same rates, terms, and conditions that are provided to CMS providers. The elements required for VoIP

E911 interconnection (listed above) typically overlap those elements required by CMS carriers. The Act also recognizes, however, that the unique circumstances of IVP providers may require access to unique capabilities not made available to CMS carriers. In recognition of the differences between IVPs and CMS carriers, the Commission should define parity as Merriam-Webster's Dictionary does: "the quality or state of being equal or equivalent." Such a definition will ensure that IVPs receive parity in E911 capability provisioning, even if the capabilities are not exactly the same as those provided to CMS carriers.

IVPs should have the same right of access regardless of whether the capabilities are offered to CMS carriers by tariff, an interconnection agreement or other contract. Further, the Commission should require entities that own or control E911 capabilities to disclose the terms of non-tariffed and non-filed agreements so that IVPs can ensure they are receiving the parity in access to which they are entitled.

# IV. Other Necessary Capabilities and Implementation Issues

# 1) Ownership or Control of E911 Elements

The FCC should define "an entity with ownership or control over an E911 element" to include carriers and non-carriers, including but not limited to state and local authorities (an E911 Capability Provider). At the outset, the FCC should make clear that it has jurisdiction to enforce IVP access to E911 capabilities through its Title I authority. Specifically, to ensure access to such resources, the Commission should clearly state that all E911 capabilities required for the provision of VoIP E911 service fall under the Commission's Title I authority under the Act, regardless of whether they are controlled or owned by telecommunications carriers or not, as they clearly concern the promotion of "safety of life and property through the use of wire and radio communication" under Section 1 of the Act, 47 U.S.C. § 151.

# 2) ILEC and PSAP Testing

Successful IVP E911 deployment requires ILEC and PSAP cooperation for testing to ensure that the systems and inputs are working correctly.

# 3) Interim Service Provisioning

Pending the resolution of any dispute between an IVP and an E911 Capability Provider, the FCC should make clear that E911 Capability Providers must provide such capabilities to IVPs that make a *bona fide* request. For example, if an IVP requests a capability that is not included in the Commission's list and makes a *prima facie* showing that such capability will be necessary in its provision of E911 service, the E911 Capability Provider should be required to provide access to such capability pending dispute resolution. E911 Capability Providers should similarly be prohibited from suspending service provided to an IVP pending the resolution of any dispute.

# 4) Coordination and Dispute Resolution

IVPs cannot transmit calls to a non-capable PSAP or deploy a complete E911 solution where they have not been given access to critical elements from third party suppliers, some of whom are IVP direct competitors. There must be a quick, efficient means to resolve disputes concerning the respective roles and responsibilities of the parties that must cooperate with IVPs so that the IVPs can comply with the FCC's rules.

### 5) Escalation Procedures

CMRS providers are typically given trouble escalation procedures to efficiently manage problems with E911 system functionality. IVPs will require similar escalation procedures to ensure that IVP E911 problems are quickly and efficiently resolved.

# **6)** Selective Router Database

There is no comprehensive list of selective routers in the country. In fact, there has been a recent trend of PSAPs and 911 authorities operating their own Selective Routers. In order to process a 911 call in these regions, IVPs require access to a comprehensive list of all of the selective routers in the United States and a corresponding list of which PSAPs are connected to which selective routers. For example, in many instances, PSAPs and ILECs are unable to provide selective router coverage mapping information in a usable format, which is critical to designing the network and placing orders to the appropriate selective routers.

# 7) Pricing Standards

The FCC should establish pricing standards applicable to the E911 elements and services required for the provision of VoIP E911 services. Such pricing should be cost-based due to the public safety nature of the elements and services being provided. The FCC should also identify the selective router as the default demarcation point between the PSAP's and IVP's networks to meet the Act's CMS parity standard. See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request of King County, CC Docket 94-102, Order on Reconsideration, FCC 02-146 (rel. July 24, 2002).

# 8) Availability of PSAP and Other Information

The FCC should utilize the authority provided by Congress in the Act to: a) require PSAPs to regularly provide the Commission with contact information, and require PSAPs to update that information as it may change from time-to-time; and b) require LECs, PSAPs, and other owners of selective routers to provide contact information for those providers of selective routers including testing procedures, classes and types of services supported by the PSAPs, and other information concerning 911 and E911 elements. The FCC should publish this collected information and make it available to telecommunications carriers, wireless carriers, IVPs, other emergency service providers, and vendors (or their agents).

# 9) Agreement Filing Requirements

The FCC should consider whether service agreements made between IVPs and E911 Capability Providers should be filed with the Commission.

<sup>&</sup>lt;sup>1</sup> The FCC already has a PSAP registry, available at http://www.fcc.gov/pshs/services/911-services/enhanced911/psapregistry.html. But, it apparently is only updated as PSAPs provide new information to the Commission. The Commission should *require* PSAPs to update their contact information with the Commission within a particular time frame when any changes are made.

<sup>&</sup>lt;sup>2</sup> The FCC should similarly require PSAPs, ILECs, and other service providers to regularly update the Commission with any new or changed information.

# 10) Development of Standards

The Commission should work with IVPs and other industry participants to develop best practices that promote consistency, where appropriate, including procedures for: (1) defining geographic coverage areas for PSAPs; (2) defining network diversity requirements for delivery of IP-enabled 911 and E911 calls; (3) call-handling in the event of call overflow or network outages; (4) PSAP certification and testing requirements; (5) validation procedures for inputting and updating location information in relevant databases; and (6) the format for delivering address information to PSAPs. Such standards should be incorporated into and made part of those E911 service and elements agreements between IVPs and E911 Capability Providers, as such standards are developed from time-to-time.

# Landline Enhanced 9-1-1 Call Flow Diagram (Simplified)

9-1-1 Call



Local Exchange Carrier Switch

Voice + ANI



Selective Router or 9-1-1 Access Tandem

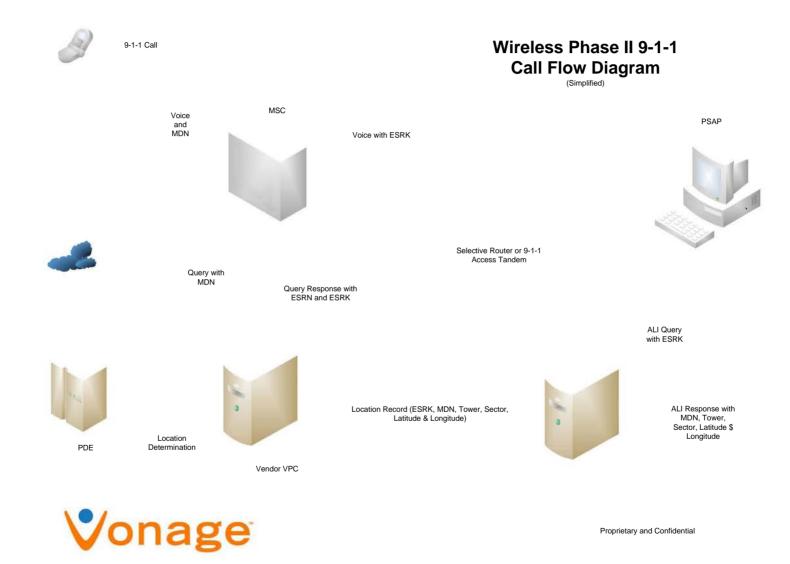


ANI ALI Response

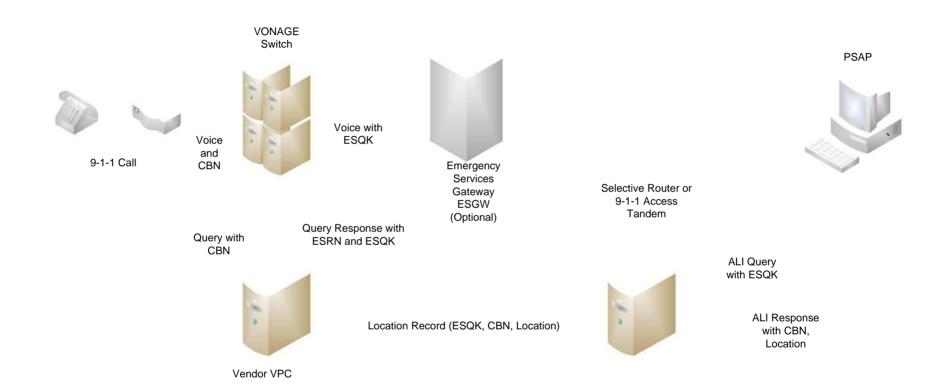


Proprietary and Confidential

e911 Call Flow Vonage 0



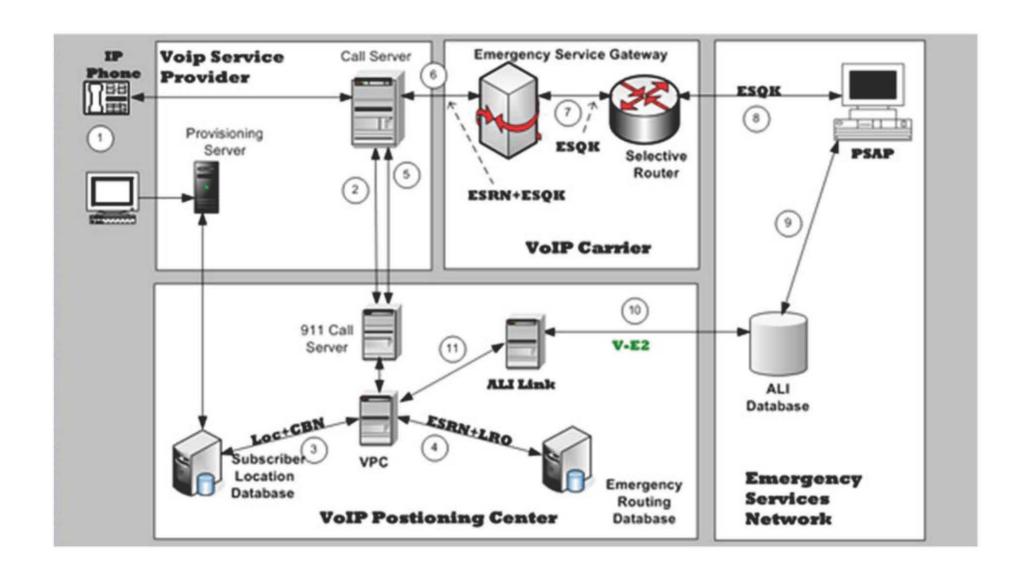
e911 Call Flow Vonage



e911 Call Flow Vonage 2

**Enhanced 9-1-1 Call Flow** 

Diagram (Simplified)



e911 Call Flow Vonage

205 (555) 555-0102 10:27 04/11 2500 S ARCHIBALD AVE ONTARIO CA 149 VOIP HBF TEST2 (909) 211-6351 FLR 12 APT 5 HBF HQ VOIP CALLER VERIFY LOCATION HBF VPC (800)342-3911 LON LAT METERS PERCENT

Customer VoIP Phone Number

Customer Address

Class of Service for Nomadic VoIP providers

Customer
Name
Call taker prompt: "VERIFY LOCATION" on ALI screen.

(Example only- does not represent all PSAP ALI/CPE display types and formats)

E-911 Call Flows

# **Attachment C**

Letter from Tamar E. Finn, Counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (filed July 23, 2008) ("Vonage Jurisdiction Ex Parte")

# BINGHAM

Tamar E. Finn

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July 23, 2008

# VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, DC 20554

Re: Ex Parte Communication;

WC Docket No. 04-36, In the Matter of IP-Enabled Services; WC Docket No. 05-196, E911 Requirements for IP Enabled Service Providers

Dear Ms. Dortch:

On behalf of Vonage Holdings Corp. ("Vonage"), this letter follows up on the July 10, 2008 ex parte meeting between Commission staff and Vonage<sup>1</sup> concerning the NET 911 Improvement Act of 2008 ("the Act").<sup>2</sup>

In order to fulfill Congress' directive that VoIP providers be given access to the elements necessary for the provision of enhanced 911 ("E911") services, the Commission is required to direct public safety answering points ("PSAPs") to provide VoIP providers such access. The Act states that for the purpose of providing 911 and E911 services, VoIP providers have the right to access elements and capabilities "from an entity with ownership or control over such capabilities," and directs the Commission to issue regulations that "ensure that IP-enabled voice service providers have the ability to exercise their rights [to obtain such access]." Nowhere in the Act did Congress imply that "entity" is limited to private parties. To the contrary, the Act requires the FCC to ensure that a VoIP provider may obtain access from any "entity" that owns or controls those required elements and components, including state or local government entities.

Likewise, the Report accompanying H.R.  $3403^{4}$  states that "[t]he term 'any entity' should be broadly construed because critical components of the 911 infrastructure may reside with an incumbent carrier, a PSAP, or some other entity." Congress intended that the

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See Letter from Ronald W. Del Sesto, counsel for Vonage, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 and 05-196 (July 11, 2008).

H.R. 3403, 110th Cong. (2008).

H.R. 3403, §101 (adding §§6(b) & (c) to the Wireless Communications and Public Safety Act of 1999).

H.R. Rep. No. 110-442 (2007) ("H.R. 3403 Report") (attached hereto as Attachment A).

H.R. 3403 Report, at 14. The Report also notes that, among other things, E911 elements that should be afforded to VoIP providers should include "interfaces, such as PSAP interface and integration capabilities...."

F 202.373.6000

Ms. Marlene H. Dortch, Secretary July 23, 2008 Page 2

FCC require PSAPs, ILECs, and other entities that own or control E911 elements or components to provide access to VoIP providers.

Although it has previously navigated E911 regulation without excessively disrupting states' authority over their 911 systems, the Commission has exercised authority over PSAPs at the direction of Congress. For example, the 1999 "911 Act" required the FCC to establish a uniform emergency telephone number to be used by all PSAPs: 9-1-1. Requiring PSAPs to use those digits did not divest the states and local governments of their general jurisdiction over PSAPs, but established a nationwide uniform standard applicable to all PSAPs that Congress determined was in the public interest. That implementation of Congress' directive required tangible action by some PSAPs to transition to "9-1-1." Analogously, Congress has now determined that VoIP provider access to E911 elements and components, including those owned or controlled by PSAPs, is in the national interest, and has obliged the FCC to ensure that VoIP providers are able to obtain such access. The Act provides the Commission authority to instruct PSAPs (and other entities) to offer VoIP providers access to critical E911 components that the entity owns or controls.

Finally, the Report also states that the FCC must revise its guidelines with respect to VoIP pseudo ANI ("p-ANI") access to ensure the Commission's regulations comply with the Act. "The Commission should also reexamine its existing regulations and make any necessary changes to comply with H.R. 3403, which include, but are not limited to, ensuring that VoIP providers that have a duty to provide 911 and E-911 services but are not competitive LECs have direct access to p-ANIs." As directed by Congress, the Commission should account for the new requirements under the Act and the accompanying Report, and ensure that the Commission's rules give VoIP providers direct access to p-ANI resources.

Pursuant to the Commission's Rules, this letter is being filed in the above-captioned proceedings for inclusion in the public record. Should you have any questions, please do not hesitate to contact the undersigned.

See, e.g., Cal. Govt. Code 53100; 50 ILCS 750; Tex. Health & Safety Code 772 (demonstrating state control over PSAPs).

See Pub. L. No. 106-81 (1999), 47 U.S.C. § 251(e). In implementing the E911 Act, the Commission noted that "[m]andating 911 as the uniform emergency assistance number would appear to ensure greater access to emergency services by mobile telephone customers." "Specifically, Section 251(e) of the Communications Act of 1934 is amended by adding a provision that the Commission designate 911 as the universal emergency telephone number for emergency assistance for both wireline and wireless telephone service. Appropriate transition periods are to be provided for areas in which 911 is not currently in use as an emergency number." See Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Second Memorandum Opinion and Order, CC Docket No. 94-102, ¶¶ 110-111 (rel. Dec. 8, 1999).

<sup>&</sup>lt;sup>8</sup> H.R. 3403 Report, at 14.

Ms. Marlene H. Dortch, Secretary July 23, 2008 Page 3

Sincerely yours,

Tamar E. Finn

Counsel for Vonage Holdings Corp.

cc (via e-mail):
Nicholas Alexander
Amy Bender
Scott Bergmann
Bruce Gottlieb
David Munson
Erika Olsen
Greg Orlando
Matthew Warren

# Attachment A

H.R. Rep. No. 110-442

\*\*\*Attachment Intentionally Omitted\*\*\*